ABSTRACT
                This report describes the content of the 115 programs
comprising "Square One TV" after two seasons of production, relating
that content to the three goals of the series. Appended is a listing
of the shows, with complete specification of each segment's content,
description, format, length, and other information. The goals and the
extent to which they have been met are detailed. Goal 1 was to
promote positive attitudes toward, and enthusiasm for, mathematics;
80% of the segments explicitly show mathematics to be a powerful and
widely applicable tool, or an aesthetically pleasing subject, or that
it can be understood, used, and even invented, by non-specialists.
Goal 2 was to encourage the use and application of problem-solving
processes; of the 430 problem-solving segments appearing in the 115
shows, almost all address this goal by explicitly illustrating the
formulation or treatment of problems. Moreover, 80% model the use of
at least one problem-solving heuristic, and almost 50% incorporate
the important stage of problem follow-up. Goal 3 was to present sound
mathematical content in an interesting, accessible, and meaningful
manner; 94% of the segments address this goal by incorporating one or
more of the series' seven mathematical areas. (MNS)

SQUARE ONE TV

SEASON TWO CONTENT ANALYSIS AND SHOW RUNDOWNS

July 21, 1988

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c. CTW, 1988

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EXECUTIVE SUMMARY

This report summarizes the mathematical and pedagogical content of the SQUARE ONE TV library after two seasons of production, relating that content to the three goals of the series. It also provides a rundown of the shows, with a complete specification of each segment's show number, content, description, format, length, and other information.

The goals of the series are these:

    I.   to promote positive attitudes toward, and enthusiasm for, mathematics;

    II.   to encourage the use and application of problem-solving processes; and

    III. to present sound mathematical content in an interesting, accessible, and meaningful manner.

The report includes a detailed elaboration of the goals.

<u>Goal I</u>. 80% of the segments of the series address Goal I by explicitly showing mathematics to be a powerful and widely applicable tool; or an aesthetically pleasing subject; or by showing that it can be understood, used, and even invented, by non-specialists.

<u>Goal II</u>. Of the 430 problem-solving segments that appear in the course of the 115 shows, almost all address Goal II by explicitly illustrating the formulation or treatment of problems. Moreover, 80% model the use of at least one problem-solving heuristic, and almost one-half incorporate the important stage of problem follow-up (by looking for alternative solutions or extending to related problems, for example).

<u>Goal III</u>. 94% of the segments address Goal III by incorporating one or more of the series' seven mathematical areas (numbers and counting; arithmetic of rational numbers; measurement; numerical functions and relations; combinatorics; statistics and probability; and geometry). 63% involve more than one mathematical topic, thus reinforcing interrelations among mathematical concepts.

SQUARE ONE TV

CONTENT ANALYSIS AND SHOW RUNDOWNS, SEASON TWO

SQUARE ONE TV is a library of programs with the potential for a long useful broadcast life. It is also finding non-broadcast uses in schools and may even be suited to other video media. Knowledge of the content of the programs is essential to use it effectively and to inform future production. We analyzed every segment of SQUARE ONE TV in terms of the series' goals. The results of our analysis reside in our comprehensive computer database. This information has been useful to compare the content of SQUARE ONE TV with other resources in mathematics education--for example, scope-and-sequence charts of mathematics curricula and local district mathematics programs. Of course, our review and analysis of the first season production were one basis for planning the second season. For example, estimation, geometry, and data representation and analysis emerged as areas needing more emphasis in the library. They all received special attention in Season II.

This report describes the content of the 115 programs of the SQUARE ONE TV library in terms of its elaborated goal statement (Appendix A). Charts and graphs show the cumulative treatment of objectives for the series' goals. Rundowns of the 40 programs of Season II (Appendix C) include descriptions of each segment of each program. Readers of this report will find rundowns of the

initial 75 programs and details of their analysis in the first
season report.[1]

SQUARE ONE TV GOALS

The series has three goals:

    I.   to promote positive attitudes toward, and
         enthusiasm for, mathematics;

   II.   to encourage the use and application
         of problem-solving processes; and

  III.   to present sound mathematical content in an
         interesting, accessible, and meaningful manner.

Of the three goals, Goal I is the most elusive. People respond
to mathematical ideas if they see concepts linked to concrete
situations, if the ideas appear beautiful and dynamic, or if they
seem accessible to people with whom the viewer can identify. We
reviewed each segment in terms of these three motivational
criteria.

Goal II operates through segments that illustrate problem-solving
behavior and problem-solving heuristics. Roughly speaking, there
are three stages of problem-solving behavior: problem
formulation, problem treatment, and problem follow-up. However,
problem-solving is rarely linear or so simply described.
Instead, a problem solver moves among the three types of
behavior, applying heuristics--for example, in representing a

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1. Schneider, Aucoin, Schupack, Pierce, and Esty, Square One TV, Season One Content Analysis and Show Rundowns,
Children's Television Workshop, 1987.

problem, in transforming a problem, in looking for patterns or other pertinent information, or in developing an alternative point of view. (The coding sheet on the page 3a illustrates our view of the problem-solving components for Goal II.) Having produced 316 segments[2] that explicitly pose a problem that is solved in the course of the segment, we analyzed their depiction of problem-solving behavior and heuristics.

Goal III involves the presentation of a broad spectrum of mathematics. We aim to provide mathematics which has clear ties to school curricula and also mathematics which would extend viewers' school experience. Our mathematical outline includes seven areas:

> Numbers and Counting;
> Arithmetic of Rational Numbers;
> Measurement;
> Numerical Functions and Relations;
> Combinatorics and Counting Techniques;
> Statistics and Probability; and
> Geometry.

See Appendix A for an outline of each area as we considered it in developing program material. The danger in this, or any other, outline is an unintended suggestion of artificial boundaries between areas rather than a reinforcement of commonality. In fact, many segments of the series deal with more than one area of mathematics.

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2. We produced 225 segments in :ason one with explicitly posed problems and 91 more in Season II.

CONTENT ANALYSIS

GOAL I

I. Positive Attitudes and Enthusiasm:

— A. Powerful and Applicable Tool

— B. Beautiful Aesthetically Pleasing Subject

— C. Initiated, Developed, and Understood by Non-Specialist

OTHER ANALYSIS

— Unanswered questions to viewer
— Invitation to participate
— Calculator use
— Computer use
— Mistakes made and corrected

GOAL III

—— , —— , ——
—— , —— , ——   Mathematics Content

PROBSOLV

NOT PROBSOLV

GOAL II

ACTION

A. PROBLEM FORMULATION

— 1. Recognize a problem; State a problem
— 2. Assess value of solving
— 3. Assess possibility of solving

B. PROBLEM TREATMENT

— 1. Recall information presented
— 2. Estimate or approximate
— 3. Make measurements; Gather data; Check resources
— 4. Calculate, or Manipulate geometric (Mental or Physical)
— 5. Consider probabilities
— 6. Use trial and error; Guess and check

D. PROBLEM FOLLOW-UP

— 1. Discuss reasonableness of results (and precision of results)
— 2. Look for alternative solutions
— 3. Look for alternative ways to solve
— 4. Look for, or extend to, related problems

HEURISTICS

C1. REPRESENT PROBLEM
— a. Scale model, drawing, map
— b. Picture; Diagram, gadget
— c. Table; Chart
— d. Graph
— e. Use objects; Act out

C2. TRANSFORM PROBLEM
— a. Reword, clarify
— b. Simplify
— c. Find subgoals, sub-problems (work backwards)

C3. LOOK FOR
— a. Patterns
— b. Missing info
— c. Distinctions in kinds of information-pertinent, extraneous

C4. REAPPROACH PROBLEM
— a. Change point of view; Reevaluate assumptions
— b. Generate new hypotheses

Date: _____   Prod. : _____

Coder: _____   Title: _____

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THE SHOWS

In terms of mathematical organization, there are two types of shows: those with a particular mathematical emphasis and those based on a variety of mathematical topics. By definition, the former have a single topic which is the focus of segments comprising about one-third of that show. There are 47 such shows. For example, Show 222, with an emphasis on the arithmetic of multiples of nine, includes a studio sketch, The Amazing Story of Nines; a music video, Nines; and two animations, Multiples of 9 and Dirklet: Divisible by Nine.

The remaining shows present a mixture of mathematics. However, 25 shows have a mini-emphasis: two or more segments on the same topic, but running shorter than one-third of the show. For example, show 224 includes four pieces dealing with percents: (Piece of the Pie, Eight Percent of My Love, Mathman: Show Interrupt #1 (45%), and Dirk Niblick: You can Fool Most of the People). Mini-emphases may also serve to support the mathematics of a show's Mathnet episode. A list of the shows with their emphases, if any, appears on page 4a.

SHOW EMPHASES

Show	Main	Mini	Emphasis
101			
102			
103			
104	x		Scale
105	x		Percents
106	x		Angles
107	x		Percents
108		x	Volume
109		x	Odd and Even Numbers
110	x		Combinatorics
111	x		Probability
112			
113	x		Fractions
114		x	Two-dimensional Shapes
115			
116	x		Spatial Measurement
117	x		Area and Perimeter
118	x		Figurate Numbers
119	x		Rounding
120	x		Prime Numbers
121	x		Common Multiples
122			
123	x		Area of Irregular Shapes
124	x		Factors and Primes
125		x	Multiples
126	x		Data Organization
127	x		Scale
128	x		Probability
129		x	Percent
130			
131	x		Place Values
132	x		Metric Measurement
133		xx	Tessellations; Fibonacci Sequences
134	x		Percent
135		x	Rates and Ratios
136	x		Fractions
137			
138	x		Parity
139	x		Working Backwards
140	x		Probability
141	x		Angles
142	x		Data Processing
143	x		Geometric Objects
144	x		Spatial Measurement
145	x		Additivity
146	x		Square Numbers
147	x		Rounding
148		x	Multiplication
149	x		Functions
150			
151		x	Pentominoes
152			
153	x		Place Value
154		x	Palindromes
155	x		Quadrilaterals
156			
157	x		Scale
158	x		Data Processing

Show	Main	Mini	Emphasis
159			
160		x	Large Numbers
161		x	Permutations
162		x	Rates
163	x		Probability
164	x		Functions (Coding)
165	x		Infinity; Parity
166	x		Multiples and Factors
167		x	Tessellations
168	x		Fractions
169	x		Area and Perimeter
170		x	Percents
171		x	Metric Measurement
172			
173	x		Logical Thinking
174			
175			
201			
202		x	Estimation
203			
204			
205	x		Modular Arithmetic
206			
207			
208			
209			
210		x	Numerical Patterns
211			
212			
213			
214			
215			
216		x	Numerical Patterns
217			
218		x	Numerical Functions
219			
220			
221			
222	x		Arithmetic of Nines
223		x	Triangles
224		x	Percents
225			
226			
227			
228		x	Triangles
229			
230		x	Numeration
231			
232			
233		x	Fibonacci Sequence
234			
235			
236			
237			
238			
239	x		Data Presentation
240			

ANALYSIS OF SEGMENTS

Second season production added 156 segments to the pool from
which we assemble programs. The six segment formats[3,4,5] occur
with the following frequencies:

	Season I		Season II		Library	
Studio Sketch	218	(46%)	17	(11%)	235	(37%)
Animation	126	(27%)	62	(40%)	188	(30%)
Mathnet Episode	35	(7%)	30	(19%)	65	(10%)
Song	35	(7%)	6	(4%)	41	(6%)
Game Show	31	(7%)	41	(26%)	72	(11%)
Live Action Film	31	(7%)	0	(0%)	31	(5%)
Totals	476		156		632	

ANALYSIS BY GOALS

We analyzed each segment for its contribution in achieving each
of the series' goals. In dealing with attitudes and motivation,
Goal I is difficult to measure objectively. Our analysis
recognizes only what is explicitly exhibited or expressed, not
what the viewer may infer. Goal I coding has three criteria which
correspond to its three objectives as described in the goal
statement (Appendix A).

Segments analyzed for Goal II are those which explicitly present
a problem for solution within the segment. For the 316 segments

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3. A seventh segment format, the bumper, is a short (typically less than 12 seconds) segue between segments of a show.
Bumpers are a prevalent feature of season one programs. We produced 207. Examples are Newsroom Interrupts, and
Warnings. Since few of the bumpers are codable to the goals, we exclude them from the statistics.

4. The careful reader who compares the season one statistics here with those reported in the season one report will note
occasional slight discrepancies. They result from a few errors in recording the coding.

5. Forty-one segments have more than one part appearing together in a show, although separated by other segments.
Multi-part segments are coded as a single segment

that meet this criterion, the analysis recognizes problem-solving behavior or applications of heuristics explicitly appear in the sketch.

Each of the seven areas of mathematics listed for Goal III is further divided as shown in the outline in Appendix A. The outline is convenient to analyze the mathematical content of the segments. However, it is not meant to suggest any attempt to segregate mathematical ideas. In fact, many segments involve problems which cut across several areas. Moreover, we make no attempt to distinguish between primary and secondary topics. In many cases it is difficult to make a clear case of primacy. And, to some extent, mathematical content is a function of the viewer's experience and perception. For example, to a less sophisticated viewer, But Who's Counting? may appear as a game primarily involving place value, while a more experienced viewer may concentrate on its probabilistic aspects.

The show rundowns in Appendix C include the complete analysis according to each goal for each segment.

FURTHER ANALYSIS

Several pedagogical concerns fall outside the elaboration of the series' goals, but are important both as a summary of the content of the library and as a guide to future production.

Calculator or computer use. We noted each instance of calculator computer use in the series. These important tools are

increasingly prevalent in the culture as well as in education. Mathematics educators are concerned about their appropriate use and incorporation into instruction. How to use them is not a specific concern of the series; characters use them when it is natural and appropriate.

Viewer participation. One learns mathematics by doing mathematics. The series provides explicit invitations for direct participation, as in the "spot the polygon" animations and some Blackstone pieces. Other segments leave unanswered questions for consideration during intervening segments (as in the two-part Dirk Niblick animations) or after the show (as in the Blackstone pieces and the song The Time Keeper). We separately tallied segments that invite participation or leave unanswered questions.

Exhibiting mistakes. Mistakes can be instructive. They are inevitably part of problem solving and learning. Modeling appropriate behavior in the face of errors or mistakes is part of the design of the series. We counted all segments in which a character makes a mistake and corrects it, such as Oops! and various segments of Mathnet.

TALLIES ACROSS 115 PROGRAMS

As noted earlier, segment production for seasons one and two totaled 632. Some segments appear more than once in the series. For example, many songs run two or three times each. Moreover, 65 segments from first season production appear in the second set of shows. The 115 programs comprise 776 segments, counting

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repeated segments. The six segment formats occur with the following frequencies:

	Season I		Season II		Library	
Studio Sketch	221	(41%)	45	(19%)	266	(34%)
Animation	101	(19%)	82	(35%)	183	(24%)
Mathnet Episode	75	(14%)	40	(17%)	115	(15%)
Song	80	(15%)	27	(12%)	107	(14%)
Game Show	28	(5%)	32	(14%)	60	(8%)
Live Action Film	37	(7%)	8	(3%)	45	(6%)
Total	542		234		776	

The charts and graphs below relate the treatment of the goals across the segments. In the game, Square One Squares, questions are independent and carry sufficient content to warrant treating them as segments in the tallies. Thus the base for the coding consists of 793 items (776 segments less 8 episodes of Square One Squares plus 25 Square One Squares questions).

GOAL I TALLIES

Of the 793 codable items in the library, 631 (80%) satisfy one or more of the three criteria for Goal I. The Venn diagrams below show the distribution.

Raw numbers:

A. Powerful   B. Beautiful

101   18   57
       6
   259   24
     176   162

C. Doable

Library

Percentages:

A. Powerful   B. Beautiful

13%   2%   7%
       1%
   32%   3%
     22%   20%

C. Doable
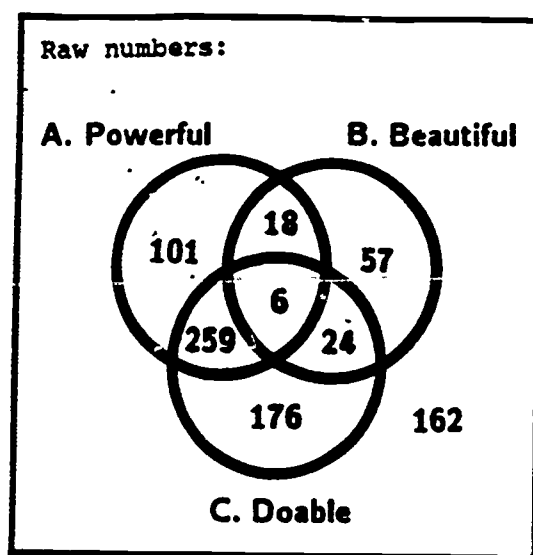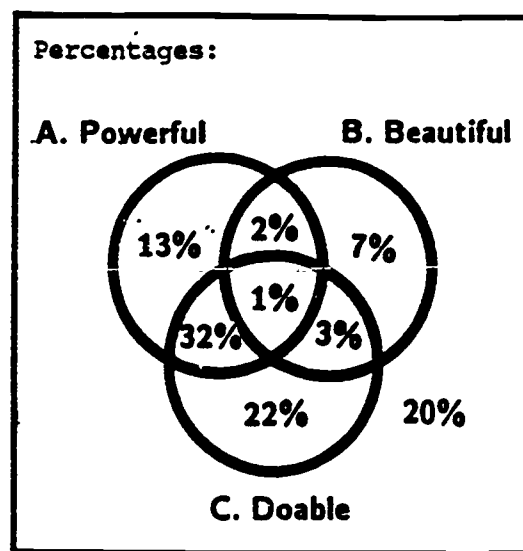
Library

GOAL II TALLIES

Of the 793 codable items, 430 explicitly present a problem for
solution within the segment (or within the Square One Squares
question). The diagram below, which is intended to recall the
relations among the four aspects of problem solving, shows the
percentage of the 430 which address each of the four Goal II
objectives. Note that many segments meet more than one
objective. See Appendix B for a finer tally of segments
according to the detailed treatment of problem solving in our
elaborated goal statement (Appendix A).

A. Problem Formulation

97%	268
97%	149
97%	417

B. Problem Treatment

95%	261
91%	140
93%	401

C. Heuristics

77%	212
84%	130
80%	342

D. Problem Follow-up

46%	127
49%	75
47%	202

Season One
Season Two
Library
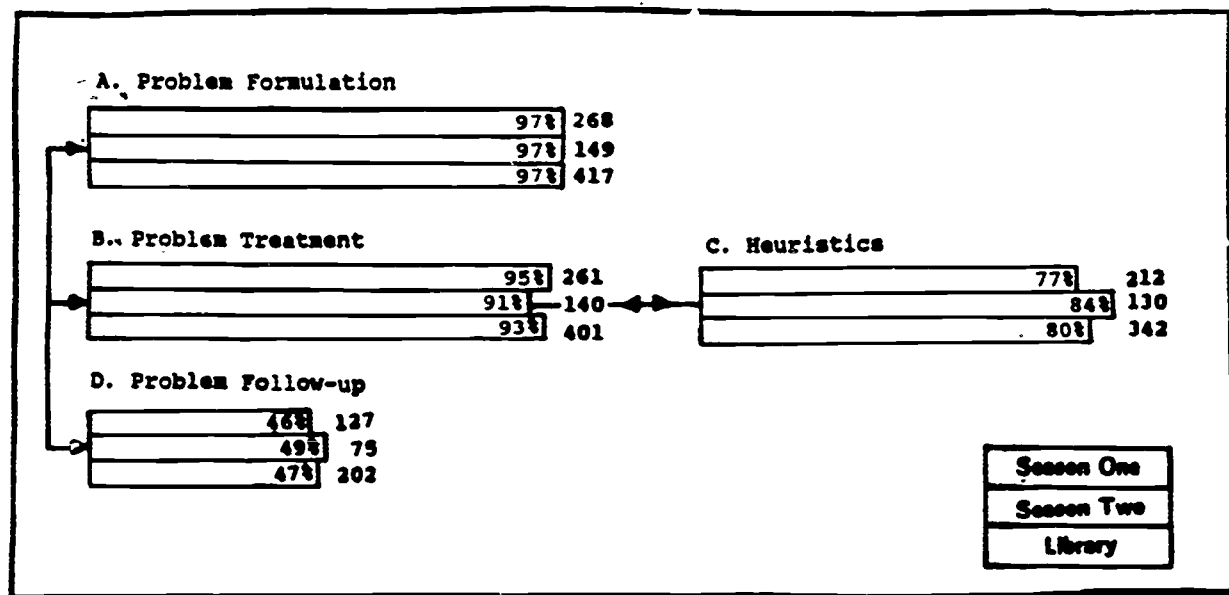
GOAL III TALLIES

The bar graph below shows the distribution of Goal III coding across the seven mathematical areas listed under Goal III. Many of the 793 items involve more than one area of mathematics and hence the percentages add to more than 100. See Appendix B for a finer tally of segments according to the detailed outline of the mathematical areas in our elaborated goal statement (Appendix A).

A. Numbers and Counting
B. Arithmetic of Rational Numbers
C. Measurement
D. Numerical Functions and Relations
E. Combinatorics and Counting Techniques
F. Statistics and Probability
G. Geometry

Number of Goal III Areas Coded

Season I
Season II
Library
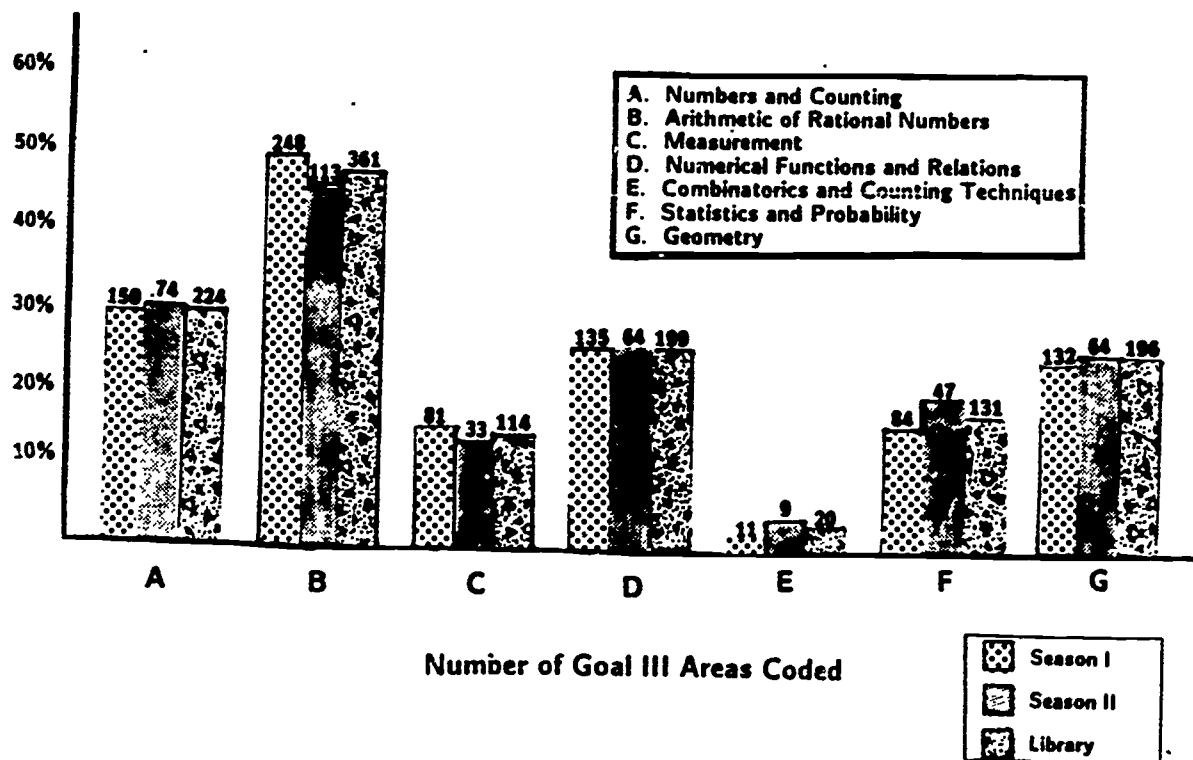
Mathematical Diversity. Many segments incorporate more than one area of mathematics. The graph below shows the mathematical diversity of the 793 items coded for Goal III by reporting the number of multiply-coded items according to the multiplicities. For example, 132 segments involve mathematics of exactly three subcategories. Of the total, 496 (63%) involve two or more areas of mathematics.

Number of Goal III Areas Coded
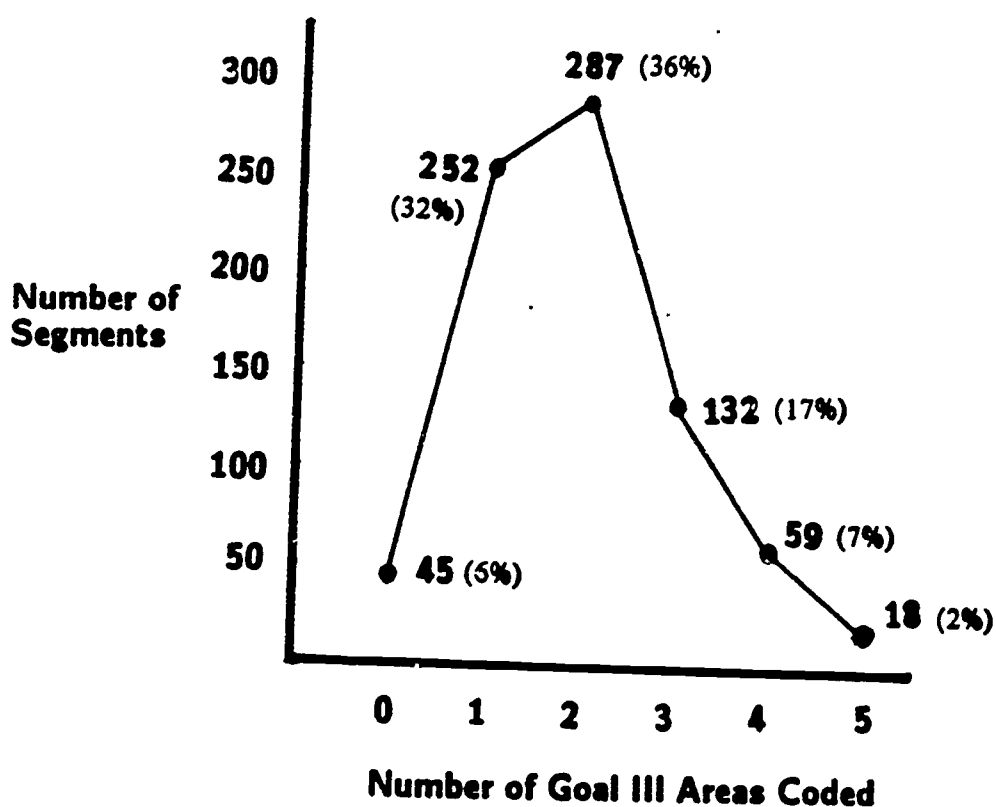
TALLIES OF FURTHER ANALYSES

The table below shows the number of the 793 items that involve the several pedagogical techniques discussed above.

Calculator use	31	4%
Computer use	44	6%
Invitation for direct viewer participation	149	19%
Unanswered questions	81	10%
Errors exhibited	197	23%

SUMMARY

This report has presented an analysis of the mathematical and pedagogical content of the SQUARE ONE TV library after two seasons of production. We related that content to the three goals of the series: to promote positive attitudes toward, and enthusiasm for, mathematics; to encourage the use and application of problem-solving processes; and to present sound mathematical content in an interesting, accessible, and meaningful manner.

Goal I. 80% of the segments of the series address Goal I by explicitly showing mathematics to be a powerful and widely applicable tool or an aesthetically pleasing subject, or by showing that it can be understood, used, and even invented, by non-specialists.

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Goal II. Of the 430 problem-solving segments that appear in the course of the 115 shows, virtually all address Goal II by explicitly illustrating the formulation or treatment of problems. Moreover, some 80% model the use of at least one problem-solving heuristic, and 47% incorporate the important stage of problem follow-up (by looking for alternative solutions or extending to related problems, for example).

Goal III. 94% of the segments address Goal III by incorporating one or more of the series' seven mathematical areas (numbers and counting; arithmetic of rational numbers; measurement; numerical functions and relations; combinatorics; statistics and probability; and geometry). 63% of the segments involve more than one mathematical topic, thus reinforcing the interrelations among mathematical concepts.

APPENDIX A

SQUARE ONE TV

COMPLETE STATEMENT OF GOALS

SQUARE ONE TELEVISION—ELABORATION OF GOALS

GOAL I. To promote positive attitudes toward, and enthusiasm for, mathematics by showing:

A. Mathematics is a powerful and widely applicable tool useful to solve problems, to illustrate concepts, and to increase efficiency.

B. Mathematics is beautiful and aesthetically pleasing.

C. Mathematics can be understood, used, and even invented, by non-specialists.

GOAL II. To encourage the use and application of problem-solving processes by modeling:

A. Problem Formulation

1. Recognize and state a problem.

2. Assess the value of solving a problem.

3. Assess the possibility of solving a problem.

B. Problem Treatment

1. Recall information.

2. Estimate or approximate.

3. Measure, gather data or check resources.

4. Calculate or manipulate (mentally or physically).

5. Consider probabilities.

6. Use trial-and-error or guess-and-check.

C. Problem-Solving Heuristics

1. Represent problem: scale model, drawing, map; picture; diagram, gadget; table, chart; graph; use object, act out.

2. Transform problem: reword, clarify; simplify; find subgoals, subproblems, work backwards.

3. Look for: patterns; missing information; distinctions in kind of information (pertinent or extraneous).

4. Reapproach problem: change point of view, reevaluate assumptions; generate new hypotheses.

D. Problem Follow-up

1. Discuss reasonableness of results and precision of results.

2. Look for alternative solutions.

3. Look for alternative ways to solve.

4. Look for, or extend to, related problems.

GOAL III. To present sound mathematical content in an interesting, accessible, and meaningful manner by exploring:

A. Numbers and Counting

1. Whole numbers.

2. Numeration: role and meaning of digits in whole numbers (place value); Roman numerals; palindromes; other bases.

3. Rational numbers: interpretations of fractions as numbers, ratios, parts of a whole or of a set.

4. Decimal notation: role and meaning of digits in decimal numeration.

5. Percents: uses; link to decimals and fractions.

6. Negative numbers: uses; relation to subtraction.

B. Arithmetic of Rational Numbers

1. Basic operations: addition, subtraction, division, multiplication, exponentiation; when and how to use operations.

2. Structure: primes, factors, and multiples.

3. Number theory: modular arithmetic (including parity); Diophantine equations; Fibonacci sequence; Pascal's triangle.

4. Approximation: rounding; bounds; approximate calculation; interpolation and extrapolation; estimation.

5. Ratios: use of ratios, rates, and proportions; relation to division; golden section.

C. Measurement

1. Units: systems (English, metric, non-standard); importance of standard units.

2. Spatial: length, area, volume, perimeter, and surface area.

3. Approximate nature: exact versus approximate, i.e., counting versus measuring; calculation with approximations; margin of error; propagation of error; estimation.

4. Additivity.

D. Numerical Functions and Relations

1. Relations: order, inequalities, subset relations, additivity, infinite sets.

2. Functions: linear, quadratic, exponential; rules, patterns.

3. Equations: solution techniques (e.g., manipulation, guess-and-test); missing addend and factor; relation to construction of numbers.

4. Formulas: interpretation and evaluation; algebra as generalized arithmetic.

E. Combinatorics and Counting Techniques

1. Multiplication principle and decomposition.

2. Pigeonhole principle.

3. Systematic enumeration of cases.

F. Statistics and Probability

1. Basic quantification: counting; representation by rational numbers.

2. Derived measures: average, median, range.

3. Concepts: independence, correlation; "Law of Averages."

4. Prediction: relation to probability.

5. Data processing: collection and analysis.

6. Data presentation: graphs, charts, tables; construction and interpretation.

G. Geometry

1. Dimensionality: one, two, three, and four dimensions.

2. Rigid transformations: transformations in two and three dimensions; rotations, reflections, and translations; symmetry.

3. Tessellations: covering the plane and bounded regions; kaleidoscopes; role of symmetry; other surfaces.

4. Maps and models in scale: application of ratios.

5. Perspective: rudiments of drawing in perspective; representation of three-dimensional objects in two dimensions.

6. Geometrical objects: recognition; relations among; constructions; patterns.

7. Topological mappings and properties: invariants.

APPENDIX B

SQUARE ONE TV

DETAILED ANALYSIS ACCORDING TO GOALS II AND III

GOAL II TALLIES

The elaborated goal statement (Appendix A) lists 3-6 sub-headings for each
Goal II objective. Tallies of the treatment of the sub-objectives in the
segments of the shows are shown in the matrix below. For example, 417 of the
430 problem-solving items from the library meet sub-objective A1 (recognize
and state a problem).

| | | Sub-objectives | | | | | |
Objectives	1	2	3	4	5	6
A. Formulation	417	100	57	–	–	–
B. Treatment	136	85	171	267	34	61
C. Heuristics	267	192	103	105	–	–
D. Follow-up	158	46	28	27	–	–

GOAL III TALLIES

The elaborated goal statement (Appendix A) lists 3-7 sub-headings for each Goal III objective. Tallies of the treatment of the sub-objectives in the segments of the shows are shown in the matrix below. For example, 10 segments of the 793 segments in the series library involve C4 (additi·ity).

	Objectives	Sub-objectives						
		1	2	3	4	5	6	7
A.	Numbers and Counting	17	45	77	42	82	15	—
B.	Arithmetic	224	85	53	48	43	—	—
C.	Measurement	37	73	36	10	—	—	—
D.	Functions	111	100	0	6	—	—	—
E.	Combinatorics	15	0	5	—	—	—	—
F.	Statistics and Probability	23	14	5	45	31	64	—
G.	Geometry	17	29	10	48	1	139	3

APPENDIX C

SQUARE ONE TV

SEASON TWO RUNDOWNS

Reading the Show Rundowns

Each entry includes descriptive data about a segment from the production data base.

Line one:
Show number--the first digit signifies the season number;
Item number--the serial number of the segment in its show;
Item Title;
Production number--unique to each segment;
Item format--a three-letter code;

ANI	animation
GAM	game show
LAF	live-action film
NET	Mathnet episode
PAR	continuation of a multi-part segment
SON	song
SOS	Square One Squares question
STU	studio sketch

Length--the running time of the segment.

Line two:
Brief description;

Last line:
Goal I classification;
Goal II classification;
Goal III classification;
Problem-solving segment (PS)--X stands for "yes".

Example: On the first page of the rundowns, we have, for show number 201, item 3, a song (SON) entitled One BIllion is Big, listed with its brief description, no Goal I coding, several Goal II classifications, and its Goal III coding of "A1 A2". It also qualifies as a problem-solving segment.

Note: The goal content of continuations of multi-part segments (PAR) is ordinarily coded under the first part. Hence the goal classifications for segments marked "PAR" are blank.

201- 1 SQUARE ONE SQUARES #5   20570   GAM   6:43
        Two students try to determine which cast member is
        giving the correct answer to the questions:
        Rectangle/Triangle Area, High/Low Temperatures, and Dirk
        Portraits.

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

201- 1 SQUARE ONE SQUARES #5 QUESTION 1   20571   SOS
        Which of the two figures has the greater area, or are
        they the same?

        GOAL 1: C   GOAL 2: A1 B4 C1e C4a   GOAL 3: C2 G2 G6 PS: X

201- 1 SQUARE ONE SQUARES #5 QUESTION 2   20572   SOS
        The bar chart has to be analyzed in order to determine
        which day of the week has the highest low temperature.

        GOAL 1:   GOAL 2: A1 B3 C2b C3c   GOAL 3: F2 F6   PS: X
                                 D4

201- 1 SQUARE ONE SQUARES #5 QUESTION 3   20573   SOS
        If one portrait of Dirk NIblick is 7cm x 10cm, how large
        is another that is in proportion and is 40cm high?

        GOAL 1: C   GOAL 2: A1 B4 C3c D1   GOAL 3: B5 G4   PS: X

201- 2 DIRK NIBLICK: FOOL MST OF THE PEOPL PT.1   20880   ANI   5:39
        Dirk comes to the aid of Mr. Beazley who was swindled by
        a Used Car salesman claiming he is giving 30% off the
        base cost of a car.

        GOAL 1: B   GOAL 2: A1 B1 B3 C1c   GOAL 3: A5   PS: X
                                 C2a D1

201- 3 ONE BILLION IS BIG   20850   SON   3:14
        The Fat Boys sing about one billion and its relative
        magnitude compared to one million.

        GOAL 1:   GOAL 2: A1 B2 B4 C1b   GOAL 3: A1 A2   PS: X
                                 C2a D1

201- 4 DIRK NIBLICK: FOOL MST OF THE PEOPL PT.2   20881   PAR   2:35

GOAL 1:   GOAL 2:   GOAL 3:   PS:

201- 5 EB: NUMBER PATTERN 37 (VERSION 1)   17190   ANI   0:21
       This short animation illustrates a number pattern
       involving multiples of 3 and multiples of 37.

GOAL 1: C   GOAL 2:   GOAL 3: D2   PS:

201- 6 MATHNET-CASE OF THE WILLING PARROT-1   20030   NET   8:44
       The Mathnetters receive a call from Walter Treppling
       about a haunted mansion. The Mathnetters go to
       investigate, only to find that the mansion is owned by
       Little Louie - a parrot.

GOAL 1: A C   GOAL 2: A1   GOAL 3: C2 D2 G4 PS:

202- 1 DIRKLET: CLOSE CALL PROMO/ESTIMATION   21210   ANI   1:01
       Dirk promotes the use of estimation and plugs the
       terrific game show of estimation, Close Call.

GOAL 1:   GOAL 2: A1 D1   GOAL 3: B4   PS: X

202- 2 ESTIMATION   21390   SON   3:51
       A song about estimation which suggests that estimating
       is a quick and easy way to get an answer fast. It is
       quite a useful tool when an answer doesn't need to be
       exact

GOAL 1:   GOAL 2: A1 B2   GOAL 3: C3   PS: X

202- 3 CLOSE CALL #7   20800   GAM   7:43
       Students compete against each other trying to get the
       closest estimate to: Spots on the Fabric, Seashells on
       the Beach Umbrella, Rubic's Cubes, and People along the
       edge of the Rug.

GOAL 1: C   GOAL 2: A1 B2   GOAL 3: C1 C3   PS: X

202- 4 EB: MULTIPLY BY ZERO-VER. 2   20890   ANI   0:35
       This short animation illustrates the idea that any
       number multiplied by zero is zero.

       GOAL 1:   GOAL 2: Al B4 Dl
                                                    GOAL 3: Bl Al   PS: X

202- 5 EB: SPOT THE QUADRILATERALS   20930   ANI   0:26
       This short animation asks the viewer to identify which
       of the polygons are quadrilaterals.

       GOAL 1:   GOAL 2: Al Dl
                                                    GOAL 3: G6   PS: X

202- 6 MATHMAN: RECTANGLES   20160   ANI   1:39
       Mathman plays a video game in which he must eat all
       polygons which are rectangles.

       GOAL 1: C   GOAL 2:
                                                    GOAL 3: G6   PS:

202- 7 MATHNET-CASE OF THE WILLING PARROT-2   20031   NET   12:06
       The Mathnetters find their ghost, Norman Tedge, hiding
       out in the mansion. Then they uncover a puzzle with a
       particular pattern which might prove to have a bearing
       on the missing money.

       GOAL 1:   GOAL 2: Al Bl B3 B4 B5   GOAL 3: A5 D2 Fl PS: X
                                 Clb C3a   F4 G6

203- 1 BLACKSTONE: CROSSED OUT NUMBERS   21020   STU   3:18
       Blackstone asks a spectator to pick out a number in each
       row of a 4x4 chart so that no two are in the same
       column. He correctly predicts that their sum is 34.

       GOAL 1:   GOAL 2:
                                                    GOAL 3: D2   PS:

203- 2 DIRKLET: MATHNET PROMO #1   21180   BUM   0:40
       Dirk reminds Square One's loyal fans that Kate and
       George will be along soon with another exciting episode
       of Mathnet.

       GOAL 1:   GOAL 2:
                                                    GOAL 3:   PS:

33

203- 3 PIECE OF THE PIE #10   20440   GAM   6:02
    Two teams alternate guessing the most common answers to
    the survey question "Name something that parents tell
    kids not to waste." The team that accumulates the
    greater percentage wins the game.

    GOAL 1: A C   GOAL 2: A1 B3 B6 C3b   GOAL 3: A5 B1 D1 PS: X
                                                       F6

203- 4 COMBO JOMBO   21400   SON   3:41
    The song demonstrates the use of combinatorics to find
    the number of combinations of bands of several sizes
    given the number of each type player available.

    GOAL 1: A   GOAL 2: A1 A3 B4 C1c D1 GOAL 3: B1 E1   PS: X

203- 5 MATHMAN: SQUARE NUMBERS #2   20050   ANI   1:18
    Mathman plays a video game in which he must eat all
    square numbers.

    GOAL 1: C   GOAL 2:   GOAL 3: B2   PS:

203- 6 MATHNET-CASE OF THE WILLING PARROT-3   20032   NET   12:13
    The Mathnetters are called in to solve the mystery of
    the missing parrot. Using problem solving skills and
    the Fibonacci sequence they are able to find the missing
    bird.

    GOAL 1: B C   GOAL 2: A1 A3 B1 B4 B6   GOAL 3: B3 G6   PS: X
                             C1e C3a C4a C4b

204- 1 TRIPLE PLAY #2   20650   GAM   5:39
    Two students compete against each other trying to cover
    the vertices of an equilateral triangle. Multiplication
    and Addition sentences must be created in order to cover
    a vertex.

    GOAL 1: C   GOAL 2: A1 B4 C1b C2c   GOAL 3: B1 G6   PS: X
                             C3a

34

204- 2 DIRK NIBLICK: ILLEGAL LAWYER PT.1   20240   ANI   4:34
Dirk helps Fluff and Fold who are being swindled by a
crooked lawyer. They were left an inheritance, but are
being given less than their fair share due to the
lawyers misuse of fractions.

GOAL 1: A B   GOAL 2: A1 B1 B3 B4 C1c GOAL 3: A3   PS: X
                        C2a

204- 3 PHONER: THE ANSWER IS 1   20490   STU   2:23
Cynthia has a one-sided telephone conversation in shich
she chooses a number and performs a series of operations
that always give her the answer of one.

GOAL 1: A C   GOAL 2:   GOAL 3: B1 D2   PS:

204- 4 DIRK NIBLICK: ILLEGAL LAWYER PT.2   20241   PAR   ·2:20

GOAL 1:   GOAL 2:   GOAL 3:   PS:

204- 5 GROANING WALL I   11871   STU   1:15
The cast tells each other riddles -- all of which have a
mathematical theme.

GOAL 1:   GOAL 2:   GOAL 3:   PS:

204- 6 MATHNET-CASE OF THE WILLING PARROT-4   20033   NET   11:03
The Mathnetters investigate the latest crime, a
birdnapping - namely, Little Louie. Their checking of
resources leads them to Norman Tedge. They arrest him,
but he escapes before their very eyes.

GOAL 1:   GOAL 2: A1 B1 B3 B6 C3b GOAL 3: B3   PS: X
                        D3·

205- 1 DIRKLET: BLACKSTONE PROMO   21270   BUM   1:00
Dirk promotes Blackstone who will be appearing later on
the show.

GOAL 1:   GOAL 2:   GOAL 3:   PS:

205- 2 MATHMAN: 2 MOD 5   20060   ANI   1:41
        Mathman plays a video game in which he must eat all
        numbers congruent to 2 mod 5.

        GOAL 1: C   GOAL 2:
                                        GOAL 3: B2 B3   PS:

205- 3 BLACKSTONE: FIVE ENVELOPE SPELLING   21100   STU   4:40
        By seeding an envelope with money among four others with
        only messages, Blackstone retains the money for himself
        when all count off to choose one. He thus illustrating
        a careful use of remainders.

        GOAL 1:   GOAL 2:
                                        GOAL 3: D2   PS:

205- 4 CALVIN KLEIN BOY   16140   LAF   1:22
        Dweezil Zappa discovers the meaning of combinatorics
        when he determines how many possible outfits he can make
        from a certain number of pants, shirts, and sweaters.

        GOAL 1: C   GOAL 2:
                                        GOAL 3: E1   PS:

205- 5 TIME KEEPER   21410   SON   3:31
        Tempestt Bledsoe sings about keeping time in a factory
        and the clock arithmetic which is involved.

        GOAL 1: C   GOAL 2: A1 B4 C1b
                                        GOAL 3: B3   PS: X

205- 6 DATA HEADACHE II   14312   STU   1:32
        A cab driver uses a pie chart to organize his business
        expenses and rid himself of a data headache.

        GOAL 1: A   GOAL 2:
                                        GOAL 3: F6   PS:

205- 7 MATHNET-CASE OF THE WILLING PARROT-5   20034   NET   11:58
        The Mathnetters use Walter Treppling's assistance in
        making a conversion between the Fibonacci sequence and a
        pattern of tiles. Solving this pattern leads them to
        the hidden fortune left in the will.

        GOAL 1: B C   GOAL 2: B1 B3 C1b C1e   GOAL 3: B1 B3 D2 PS: X
                                 C2a C2c C3a C3b

206- 1 DIRK NIBLICK: TO HECK AND BACK PT.1   21120 ANI   5:31
Dirk comes to the rescue of his neighbor, Mr. Beazley,
who is accused of having robbed a bank in the town of
Heck. Dirk proves Beazley's innocence based on
distance, rate and time.

    GOAL 1:   GOAL 2: A1 B2 B3 B4 C1c GOAL 3: C2 C3   PS: X
                        C2a C3b D1

206- 2 MATHMAN: FRACTIONS GREATER THAN 1   20070 ANI   1:37
Mathman plays a video game in which he must eat all
fractions which are greater than 1.

    GOAL 1: C   GOAL 2:   GOAL 3: A3   PS:

206- 3 DIRK NIBLICK: TO HECK AND BACK PT.2   21121 PAR   2:20

    GOAL 1:   GOAL 2:   GOAL 3:   PS:

206- 4 CLOSE CALL #9   20820 GAM   6:54
Students compete against each other trying to get the
closest estimate to: Peanuts in the Container, Peanut
Butter Jars/Elephant, Slinkies on the Rain Slickers, and
% of Audience with Beach Balls.

    GOAL 1: C   GOAL 2: A1 B2   GOAL 3: A5 C1 C2 PS: X

206- 5 EB: MIXED NUMBERS 4/3   20950 ANI   0:15
This short animation illustrates mixed numbers by
showing the same amount of liquid in a number of
different glasses.

    GOAL 1: A   GOAL 2:   GOAL 3: A3 D1   PS:

206- 6 PRIME NUMBERS   20840 SON   3:42
The Jets sing a song about prime numbers.

    GOAL 1:   GOAL 2: A1 B4   GOAL 3: B2 B3   PS: X

37

206- 7 EB: PRIME NUMBERS   21360   ANI   0:23
This short animation illustrates the prime numbers on a
100 grid.

GOAL 1:   GOAL 2:   GOAL 3: B2   PS:

206- 8 SQUARE ONE PUZZLER: RECTANGLES   21160   ANI   0:41
A short animation puzzler: How many rectangles are in
the diagram? The viewer must take into account the
embedded rectangles.

GOAL 1:   GOAL 2: A1 B4 C1b C1e   GOAL 3: G6   PS: X
                          C2c

206- 9 MATHNET-CASE OF THE GREAT CAR ROBBERY-1   20010   NET   5:43
The Mathnetters are called in to investigate the
increase in the number of cars being stolen in the L.A.
area. They begin by analyzing data collected from the
robberies in the hope of finding clues.

GOAL 1: C   GOAL 2: A1 B2 B3 B4 C1c   GOAL 3: A5 B4 F5   PS: X
                     C2a C3a   F6

207- 1 DIRKLET: SQUARE ONE SQUARES PROMO   21200   BUM   0:44
Dirk reminds Square One TV viewers to stay tuned for
another exciting challenge on Square One Squares.

GOAL 1:   GOAL 2:   GOAL 3:   PS:

207- 2 BLACKSTONE: MAGIC SAFARI   21080   STU   3:45
Blackstone illustrates associativity by forcing the
spectator to count to a pig in a collection of animals
in a circle.

GOAL 1:   GOAL 2:   GOAL 3: D2   PS:

207- 3 SQUARE ONE SQUARES #7   20590   GAM   8:07
Two students try to determine which cast member is
giving the correct answer to the questions: Embedded
Squares, Blue Hair/Sunglasses, Cube with a Corner cut
off, and Dozen Dozen.

GOAL 1:   GOAL 2:   GOAL 3:   PS:

207- 3 SQUARE ONE SQUARES #7 QUESTION 1   20591   SOS
        How many squares are in the paintbox grid?

        GOAL 1: C   GOAL 2: Al B4 Clb Cle   GOAL 3: G6   PS: X
                                  C2c C4a

207- 3 SQUARE ONE SQUARES #7 QUESTION 2   20592   SOS
        Eight people are going to a rock concert. Six of them
        have blue hair, four are wearing sunglasses. What is
        the smallest number who have blue hair and sunglasses?

        GOAL 1: C   GOAL 2: Al A3 B4 Clb   GOAL 3: C4   PS: X
                                  Cle

207- 3 SQUARE ONE SQUARES #7 QUESTION 3   20593   SOS
        Which of two nets can be folded to form a cube with a
        corner cut off?

        GOAL 1: C   GOAL 2: Al B4 Cle Dl   GOAL 3: G2 G6   PS: X

207- 3 SQUARE ONE SQUARES   'ESTION 4   20594   SOS
        Which is more: six do.. n dozen or half a dozen dozen?

        GOAL 1: C   GOAL 2: Al B4 C2a   GOAL 3: A2 Dl   PS: X

207- 4 STICK SQUARES - 3   13953   STU   0:41
        Alison Smith demonstrates toothpick square tricks to the
        viewing audience.

        GOAL 1: C   GOAL 2: Al B4 Dl D2 Cle GOAL 3: G6   PS: X
                                  C4a

207- 5 MATHMAN: MULTIPLES OF 5   15670   ANI   1:09
        Mathman plays a video game in which he must eat only
        numbers that are multiples of 5.

        GOAL 1: C   GOAL 2:   GOAL 3: B2   PS:

207- 6 ME AND MY SHADOW   13660   STU   2:36
        Debbie Allen discusses dimensionality by comparing her
        own 3-dimensionality with the 2-dimensionality of her
        shadow.

        GOAL 1: C   GOAL 2:   GOAL 3: Gl C2   PS:

207- 7 MATHNET-CASE OF THE GREAT CAR ROBBERY-2   20011   NET   10:39
The Mathnetters continue their investigation into the
missng cars and meet Li So, a young lady whose car has
been stolen. Although she saw it being towed, the
L.A.P.D. has no record of taking it.

          GOAL 1:   GOAL 2: A1 B4 C1d C2c   GOAL 3: A5 B4 F2   PS: X
                                    C3a C3b C3c C4a   F5 F6

208- 1 TRIPLE PLAY #1   20640   GAM   5:48
Two students compete against each other trying to cover
the vertices of an equilateral triangle. Multiplication
and Addition sentences must be created in order to cover
a vertex.

          GOAL 1: C   GOAL 2: A1 B4 C1b C2c   GOAL 3: B1 G6   PS: X
                                    C3a

208- 2 DIRKLET: USE GRAPHS   21340   BUM   1:17
Dirk suggests that a good problem solving heuristic is
to make a graph.

          GOAL 1: A C   GOAL 2: A1   GOAL 3:   PS:

208- 3 OOPS! 1/2 + 1/3 = 2/5   20460   STU   1:37
A confused character makes a mistake when adding 1/2 +
1/3 which causes a stock-footage disaster.

          GOAL 1: A   GOAL 2: A1 A2 B4 D1   GOAL 3: B1 A3   PS: X

208- 4 COMMON MULTIPLE MAN   11890   STU   4:21
When a couple has to figure out how many hors d'oeuvres
to buy to serve either 12, 16, or 24 guest equally ,
they call Common Multiple Man, a super hero with a very
strange super power.

          GOAL 1: A C   GOAL 2: A1 A3 B1 B4 D1   GOAL 3: B2   PS: X
                                  D2 D4 C1c C2c C

208- 5 MATHMAN: PENTAGONS   20150   ANI   1:33
Mister Glitch plays a video game in which he must eat
all polygons which are pentagons.

          GOAL 1: C   GOAL 2:   GOAL 3: G6   PS:

208- 6 ARCHIMEDES   21130   SON   2:56
        This song about Archimedes highlights some of his
        inventions and discoveries.

        GOAL 1: A   GOAL 2:   GOAL 3:   PS:

208- 7 MATHNET-CASE OF THE GREAT CAR ROBBERY-3   20012   NET   9:39
        20,000 cars have disappeared from L.A. during the past
        two months with a recovery rate of only 30 percent. The
        Mathnetters decide to speak to a used car dealer to
        learn more about the missing cars.

        GOAL 1:   GOAL 2: A1 B1 B3 C1c   GOAL 3: B5 F5 F6 PS: X
                                 C2c C3a C3b C4a

209- 1 DIRK NIBLICK: THE LINT TRAP PT.1   20270   ANI   4:58
        Dirk helps Fluff and Fold understand that they were
        underpaid by their boss, Soapy LaFong. He paid them for
        only four hours a day although they had clearly worked
        four and a half hours each day.

        GOAL 1: B   GOAL 2: A1 B4 C1c C2a   GOAL 3: B3   PS: X
                                 C2b

209- 2 YOU CAN COUNT ON IT   16680   SON   1:58
        This song presents various ways that math shows up in
        the world.

        GOAL 1: A C   GOAL 2:   GOAL 3: C1   PS:

209- 3 DIRK NIBLICK: THE LINT TRAP PT.2   20271   PAR   2:48

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

209- 4 EB: SPOT THE HEXAGONS   20920   ANI   0:26
        This short animation asks the viewer to identify which
        of the polygons are hexagons.

        GOAL 1:   GOAL 2: A1 D1   GOAL 3: G6   PS: X

209- 5 PIECE OF THE PIE #2   20360   GAM   5:27
       Two teams alternate guessing the most common answers to
       the survey question "Name something you do when you are
       bored." The team that accumulates the greater
       percentage wins the game.

       GOAL 1: A C   GOAL 2: Al B6 C3b   GOAL 3: A5 B1 D1 PS: X
                                                          F6

209- 6 CABOT & MARSHMALLOW: ROUND TO CONFOUND   14850   STU   1:21
       Marshmallow learns that rounding numbers is not always
       appropriate when Cabot rounds the $4.50 he owes
       Marshmallow down to zero.

       GOAL 1: C   GOAL 2: Al A3 B2 B4 D1   GOAL 3: B4 B1   PS: X
                               D3 C2b

209- 7 MATHNET-CASE OF THE GREAT CAR ROBBERY-4   20013   NET   10:31
       With Li So's help, the Mathnetters determine that the
       pattern of heavy cars being stolen is an important clue
       in the crimes. They hypothesize that the cars are being
       recycled as scrap metal.

       GOAL 1:   GOAL 2: Al B2 B3 B4 B5   GOAL 3: Bl B4 B5 PS: X
                               B6 Clc C2c C3b   F6

210- 1 PHONER: THE ANSWER IS 6   20520   STU   2:12
       Reg has a one-sided telephone conversation in which he
       chooses a number and performs a series of operations
       that always give him the answer of six.

       GOAL 1: A C   GOAL 2:   GOAL 3: Bl D2   PS:

210- 2 DIRKLET: LOOK FOR A PATTERN   21330   ANI   1:46
       Dirk suggests that a good problem solving heuristic is
       to look for a pattern .

       GOAL 1:   GOAL 2: Al C2a C3a   GOAL 3: D2   PS: X

210- 3 BLACKSTONE: LIAR AND TRUTHTELLER   21030   STU   3:10
       One spectator is to lie, the other to tell the truth in
       answering Blackstone's question. Even though he does
       not know which is the liar, the answer to one question
       reveals which holds a hidden coin.

       GOAL 1: A   GOAL 2:   GOAL 3:   PS:

210- 4 BALONEY   14300   STU   1:43
         Two crazy characters visit the International House of
         Balony where they have a choice of any 2 of the 4
         toppings for their sandwiches. They demonstrate and
         make a list to determine the possibilities.

         GOAL 1: A C   GOAL 2: B3 C1b C2c   GOAL 3: E1 F6   PS: X

210- 5 MATHMAN: INEQUALITY 19-C < 5   20110   ANI   1:29
         Mathman plays a videogame in which he must eat all
         numbers which satisfy the inequality 19-C < 5.

         GOAL 1: C   GOAL 2:   GOAL 3: B1 D1 D4   PS:

210- 6 MATHNET-CASE OF THE GREAT CAR ROBBERY-5   20014   NET   15:24
         The Mathnetters set a trap for the car robbers. The
         robbers fall for the trap, leading the Mathnetters to
         the scrap metal site where they catch their culprit.

         GOAL 1:   GOAL 2: A1 B1 B3 B4 C1d GOAL 3: B4 B5 F2 PS: X
                                  C1e C3a   F5 F6

211- 1 SQUARE ONE SQUARES #8   20600   GAM   7:02
         Two students try to determine which cast member is
         giving the correct answer to the questions:
         Wigs/Glasses, Lion, and Sliced Cube.

         GO' 1:   GOAL 2:   GOAL 3:   PS:

211- 1 SQUARE ONE SQUARES #8 QUESTION 1   20601   SOS
         How many different combinations of sunglasses/wigs can
         you make if you have four pairs of sunglasses and three
         kinds of wigs?

         GOAL 1: C   GOAL 2: A1 B4 C1e   GOAL 3: B1 E1   PS: X

211- 1 SQUARE ONE SQUARES #8 QUESTION 2   20602   SOS
         Dishes of kitty food are placed in a line 10 meters
         apart. If a lion started at the first bowl and went
         down the line eating all the kitty food, how many dishes
         of kitty food did it eat?

         GOAL 1:   GOAL 2: A1 B4 C1b C2c   GOAL 3: C2 D1   PS: X

43

211- 1 SQUARE ONE SQUARES #8 QUESTION 3   20603   SOS
        A cube is sliced and separated. What shape will the
        face of the sliced cube take on?

        GOAL 1: C   GOAL 2: A1 B4 C2a C3c   GOAL 3: G6   PS: X

211- 2 DIRK NIBLICK: DO NOT FOLD, SPINDLE, PT.1   21110   ANI   6:07
        Dirk confronts a salesman about the legitimacy of his
        sales tactics. He pressures his customers into buying
        three sixty minut : audio tapes for $3.95 instead of two
        ninety minute tar :s for $2.95.

        GOAL 1: A   GOAL 2: A1 B1 B3 C1c D1 GOAL 3: B5   PS: X

211- 3 LESS THAN ZERO   14150   SON   2:04
        This song presents a diving, dance, skating, and
        hammer-throw competition to show arithmetic realizations
        of negative numbers.

        GOAL 1: C   GOAL 2:   GOAL 3: A6 D1   PS:

211- 4 DIRK NIBLICK: DO NOT FOLD, SPINDLE, PT.2   21111   PAR   2:45

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

211- 5 MATHNET-DECEPTIVE DATA-1   20340   NET   9:33
        The Mathnetters discuss sampling as a means of
        estimating the number of viewers for a radio show. They
        do this in an effort to understand why The Mike Piers
        Show was taken off the air.

        GOAL 1:   GOAL 2: A1 A2 B1 B2 B3   GOAL 3: A3 B4 F1 PS: X
                                 D1

212- 1 DIRK NIBLICK: GO WEST YOUNG MATH. PT.1   20250   ANI   5:53
        Dirk comes to the rescue of townspeople being swindled
        when purchasing land. Although they receive the proper
        amount of land, it is not in dimensions suitable for
        building.

        GOAL 1: A C   GOAL 2: A1 A2 B1 B3 B4   GOAL 3: C2 D2   PS: X
                                 C1b C2a D1 D2

212- 2 BUREAU OF MISSING NUMBERS: 14   15930   STU   1:59
       Terry Ryan, an FBI type, takes information pertaining to
       the number 14 and inputs this information into her
       computer. These characteristics include factors, whether
       or not it is prime or square, etc.

       GOAL 1: A   GOAL 2: A1 B3 B4 C2c   GOAL 3: B2 B1   PS: X

212- 3 DIRK NIBLICK: GO WEST YOUNG MATH. PT.2   20251   PAR   3:10

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

212- 4 MATHMAN: SHOW INTERRUPT #3 (3/8)   20210   ANI   0:26
       Mathman is told that 3/8 of the show is over and must
       decide what fraction of the show remains.

       GOAL 1: C   GOAL 2:   GOAL 3: A3   PS:

212- 5 MATHNET-DECEPTIVE DATA-2   20341   NET 15:33
       Through experimentation and graphing, the Mathnetters
       get a better understanding of sampling.

       GOAL 1:   GOAL 2: B1 C1d C1e   GOAL 3: A5 B4 F1 PS: X
                                                      F5 F6

213- 1 DIRKLET: TRIPLE PLAY PROMO/TRIANGLES   21190   ANI   0:47
       Dirk says he loves Triple Play and wonders if all
       triangles are equilateral.

       GOAL 1:   GOAL 2: A1   GOAL 3: G6   PS: X

213- 2 ANGLE DANCE   10180   SON   4:23
       The rock group Plane Geometry sings a song about angles
       and uses body movement to illustrate angles, as well.

       GOAL 1: B C   GOAL 2:   GOAL 3: G6   PS:

213- 3 TRIPLE PLAY #4   20670   GAM   4:20
       Two students compete against each other trying to cover
       the vertices of an equilateral triangle. Multiplication
       and Addition sentences must be created in order to cover
       a vertex.

       GOAL 1: C   GOAL 2: A1 B4 C1b C2c   GOAL 3: B1 G6   PS: X
                                C3a

213- 4 MATHMAN: PARALLELOGRAMS   20170   ANI   1:25
       Mathman plays a video game in which he must eat all
       polygons which are parallelgrams.

       GOAL 1: C   GOAL 2:   GOAL 3: G6   PS:

213- 5 MAN AT DESK (HEAD CALCULATOR)   16080   LAF   0:58
       In this commercial take-off, a character reveals the
       human head as the world's most popular calculator.

       GOAL 1: A C   GOAL 2:   GOAL 3: B1 B2   PS:

213- 6 MATHNET-DECEPTIVE DATA-3   20342   NET   17:20
       The Mathnetters use charts to analyze data obtained from
       the Hoover Rating Service. They find that the Mike
       Pliers Show took a sudden drop just as the Viscious
       Vinnie Show took off in the ratings.

       GOAL 1: A C   GOAL 2: A1 A2 B1 B3 C1c GOAL 3: F1 F2 F5 PS: X
                                C1d C3a C3c C4a   F6

214- 1 CLOSE CALL #1   20740   GAM   7:00
       Students compete against each other trying to get the
       closest estimate to: Pushpins in the Square One Logo,
       Boxer Shorts on a Clothesline, Sections of a Hero
       Sandwich, and % of Audience with cards.

       GOAL 1: C   GOAL 2: A1 B2 D1   GOAL 3: A5 C1 C3 PS: X

214- 2 DIRKLET: PAPER AND PENCIL #2   21260   BUM   1:15
       Dirk reminds viewers to have paper and pencil for
       upcoming segments of the show.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

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214- 3 BLACKSTONE: NUMBER AFFINITY   21010   STU   2:20
    Blackstone asks a spectator to pick a number from 1 to
    9, double it, add 2, multiply by 5, and subtract 6. The
    result appears when he juxtaposes the spectator's
    concealed number with his own.

       GOAL 1:   GOAL 2:   GOAL 3: B1 D2   PS:

214- 4 PHONER: THE ANSWER IS 3   15970   STU   2:23
    Arthur has a one-sided telephone conversation in which
    he chooses a number and performs a series of operations
    that always give him the answer of 3.

       GOAL 1: A C   GOAL 2:   GOAL 3: D2 B1   PS:

214- 5 MATHNET-DECEPTIVE DATA-4   20343   NET   14:10
    The Mathnetters interview individuals who are part of
    the Hoover Ratings Service Sample. They find evidence
    to suggest that the ratings have been altered.

       GOAL 1: A B   GOAL 2: A1 B1 B3 C1c   GOAL 3: C3 F5 F6 PS: X
                               C4a C4b D1

215- 1 MATHMAN: QUADRILATERALS   20130   ANI   1:25
    Mathman plays a video game in which he must eat all
    polygons which are quadrilaterals.

       GOAL 1: C   GOAL 2:   GOAL 3: G6   PS:

215- 2 DIRKLET: PIECE OF THE PIE PROMO   21220   BUM   1:10
    Dirk promotes the game show, Piece of the Pie, which is
    coming up soon on Square One TV.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

215- 3 THINK ABOUT THE PROBLEM   16990   SON   2:55
    This song offers advice to a boy who is confused about
    which bike to buy. The music video stresses stepping
    back from a problem and looking at it from another
    angle.

       GOAL 1: A C   GOAL 2: A1 A2 B3 C1e   GOAL 3: D1   PS: X
                               C4a

215- 4 PIECE OF THE PIE #3   20370   GAM   5:19
Two teams alternate guessing the most common answers to
the survey question "What's your favorite snack?" The
team that accumulates the greater percentage wins the
game.

GOAL 1: A C   GOAL 2: A1 B6 C3b D2   GOAL 3: A5 B1 D1 PS: X
                                                   F6

215- 5 MATHNET-DECEPTIVE DATA-5   20344   NET   14:48
After finding that many rating boxes have been tampered
with, the Mathnetters decide to visit Viscious Vinnie.
He confesses to his crime of rigging the ratings and
forcing Mike Pliers off the air.

GOAL 1:   GOAL 2: A1 A3 B1 B3 B4   GOAL 3: A5 B4   PS: X
                         C1b C2a C4b D1

216- 1 BLACKSTONE: MAGIC DICE (LEADS DIRK)   21060   STU   2:51
Blackstone illustrates the fact that opposing faces of a
die add to seven. With this he can predict the result
of an arithmetic manipulation of the number on a rolled
die.

GOAL 1: B   GOAL 2:   GOAL 3: D2   PS:

216- 2 DIRKLET: ORDER OF MULTIPLICATION   21280   ANI   1:19
Dirk explains that multiplying two numbers together can
be done in either order and the product is always the
same.

GOAL 1:   GOAL 2: A1 C2a   GOAL 3: B1   PS: X

216- 3 SQUARE ONE SQUARES #11   20630   GAM   6:52
Two students try to determine which cast member is
giving the correct answer to the questions: Circle with
a Line Segment through it, Sliced Cones, and Joel/Kathy
Pizza.

GOAL 1:   GOAL 2:   GOAL 3:   PS:

216- 3 SQUARE ONE SQUARES #11 QUESTION 1   20631   SOS
        Can the paintbox figure be drawn with one continuous
        line without retracing, or does it require more than one
        line?

        GOAL 1: C   GOAL 2: A1 B4 C1b C1e   GOAL 3: E3 G6 G7   PS: X
                                C2c C4a D3

216- 3 SQUARE ONE SQUARES #11 QUESTION 2   20632   SOS
        A cone is sliced. What shape is determined by the
        slice?

        GOAL 1: C   GOAL 2: A1 B4 C1e   GOAL 3: G6   PS: X

216- 3 SQUARE ONE SQUARES #11 QUESTION 3   20633   SOS
        Which is more: two or seven-thirds?

        GOAL 1: C   GOAL 2: A1 B4 C1b C2a   GOAL 3: A3 D1   PS: X

216- 4 EB: NUMBER PATTERN SQUARE NOS. (ver. 2)   21660   ANI   0:19
        This short animation illustrates a number pattern
        involving square numbers: square numbers are the sum of
        consecutive odd numbers starting with 1.

        GOAL 1: B   GOAL 2:   GOAL 3: D? B2   PS:

216- 5 PERFECT SQUARES   13140   SON   3:25
        A blues band sings about square numbers and graphically
        suggests their connection to geometry.

        GOAL 1: A C   GOAL 2:   GOAL 3: B2 B1   PS:

216- 6 MATHNET-REAR TERRACE-1   20320   NET   12:30
        George Frankly is working by himself since Kate is at
        home with a bum knee. He has accumulated data on a
        series of bank pranks. When he shares this data with
        Kate, she notices a pattern.

        GOAL 1:   GOAL 2: A1 B1 B2 B3 C1a   GOAL 3: B4 B5 F5 PS: X
                                C1c C3a C3b D1   F6

217- 1 DIRK NIBLICK: MALL OR NOTHING AT ML PT.1   20260   ANI   6:06
Dirk comes to the rescue of Fluff and Fold who are being
deceived by a biased survey.

    GOAL 1: B   GOAL 2: A1 A2 B1 B3 C1c GOAL 3: A5 F5   PS: X
                             C2a D1 D4

217- 2 CLOSE CALL #2   20750   GAM   6:42
Students compete against each other tring to get the
closest estimate to: Rubber Balls in Phone Booth, Pumps
of Air into a Balloon, Ball of Rope, and Hands on a
Baseball Bat.

    GOAL 1: C   GOAL 2: A1 B2 C2a D1   GOAL 3: C1 C3   PS: X

217- 3 EB: NUMBER PATTERN 37 (VERSION 2)   17200   ANI   0:21
This short animation illustrates a number pattern
involving multiples of 3 and multiples of 37.

    GOAL 1: C   GOAL 2:   GOAL 3: D2   PS:

217- 4 DIRK NIBLICK: MALL OR NOTHING AT ML PT.2   20261   PAR   2:38

    GOAL 1:   GOAL 2:   GOAL 3:   PS:

217- 5 EB: PALINDROME-VER.2   20900   ANI   0:41
This animation illustrates generating a palingfrom from
any two digit- number simply reverse the digits and add
and repeat this process until the sum is a palindrome.

    GOAL 1:   GOAL 2:   GOAL 3: A2 B1 D2 PS:

217- 6 MATHNET-REAR TERRACE-2   20321   NET   11:09
George meets with a reporter who has been receiving
poems about the bank pranks. George goes over the facts
in search of a motive. He is interupted when Kate calls
claiming her neighbor has a bomb.

    GOAL 1:   GOAL 2: A1 A2 A3 B1 B2   GOAL 3: A5 B4 F2 PS: X
                        B3 C1c C2a C3a   F5 F6

218- 1 DIRK NIBLICK: ITTY BITTY BUSINESS PT.1   20220   ANI   5:36
Dirk comes to the aid of the town merchants who are
having to close business due to being swindled by a
crooked accountant.

GOAL 1: A   GOAL 2: Al A2 Bl B3 B4   GOAL 3: A4 A5   PS: X
                       Clc C2a Dl D4

218- 2 KUBRICK'S RUBE   15250   STU   2:57
In order to stop its incessant singing, Irving and Dave
give Hank the computer a program he can never finish:
start with 3; add 4; stop if the sum is even; if not go
back to step two.

GOAL 1: A C   GOAL 2: Al A2 A3   GOAL 3: Dl D2   PS: X

218- 3 MATHMAN: SHOW INTERRUPT #2   (1/3)   20200   ANI   0:35
Mathman is told that 1/3 of the show is over and must
decide what fraction of the show remains.

GOAL 1: C   GOAL 2:   GOAL 3: A3   PS:

218- 4 DIRK NIBLICK: ITTY BITTY BUSINESS PT.2   20221   PAR   2:59

GOAL 1:   GOAL 2:   GOAL 3:   PS:

218- 5 PERPENDICULAR LINES   14120   SON   2:01
This rock video, colorized with computer graphics,
illustrates the various places we find perpendicular
lines in the world.

GOAL 1: A C   GOAL 2:   GOAL 3: G6   PS:

218- 6 PHONER: THE ANSWER IS 5   20510   STU   2:03
Arthur has a one-sided telephone conversation in which
he chooses a number and performs a series of operations
that always give him the answer of five.

GOAL 1: A C   GOAL 2:   GOAL 3: Bl D2   PS:

218- 7 OOPS! 34 X 12   20480   STU   1:42
A confused character makes a mistake when multiplying 34
X 12 which causes a stock-footage disaster.

     GOAL 1: A   GOAL 2: A1 A2 B4 D1   GOAL 3: B1   PS: X

218- 8 MATHNET-REAR TERRACE-3   20322   NET   9:32
George convinces Kate that her neighbor doesn't have a
bomb. Then, when he looks more closely at the poems, he
notices a pattern. Each poem is written on a slip from
the next bank to be pranked.

     GOAL 1:   GOAL 2: A1 B2 B3 C1d   GOAL 3: A5 B4 F5 PS: X
                              C2a C2c C3a C3b   F6

219- 1 PIECE OF THE PIE #4   20380   GAM   6:09
Two teams alternate guessing the most common answers to
the survey question "Name something that is noisy." The
team that accumulates the greater percentage wins the
game.

     GOAL 1: A C   GOAL 2: A1 B3 B6 C3b D2 GOAL 3: A5 B1 D1 PS: X
                                                     F6

219- 2 DIRKLET: MATHNET PROMO #2   21240   BUM   0:40
Dirk promotes Mathnet which is coming along soon on
Square One TV.

     GOAL 1:   GOAL 2:   GOAL 3:   PS:

219- 3 BLACKSTONE: 13 TURNS   21070   STU   2:46
A spectator rotates an oriented die 12 times and decides
whether to do so a 13th time. A glance at the die tells
Blackstone what has been done. Parity of the sum of 3
faces at a corner is the key.

     GOAL 1: B   GOAL 2:   GOAL 3: B3   PS:

219- 4 POS-NEG JOUST: THE WALL +4 PLUS -9   15295   ANI   0:34
When nine "negative" clay-mation creatures surprise 4
"positive" creatures, five "negative" creatures remain.

     GOAL 1: A   GOAL 2:   GOAL 3: A6 B1   PS:

219- 5 MATHNET-REAR TERRACE-4   20323   NET   16:58
George pays a visit to the next pranked bank, but fails
to nab the culprit. Then he gets another call from Kate
reporting that her neighbor has a plastic explosive. It
turns out to be sculpting clay.

GOAL 1:   GOAL 2: A1 A2 B3 B4 C1c   GOAL 3: A5 B1 F2   PS: X
                         C2c C3a C3b C3c

220- 1 RAPPIN' JUDGE   14740   STU   2:40
A judge raps his decision that a girl on a skateboard
could not have committed the crime because she could not
have travelled 8 miles in 2 hours if she were only going
3 miles per hour.

GOAL 1: A C   GOAL 2: A1 B1 B3 B4 D1   GOAL 3: B5 C2 B1   PS: X
                         C1a

220- 2 TRIPLE PLAY #7   PLAYOFF   20700   GAM   4:41
Two students compete against each other trying to cover
the vertices of an equilateral triangle. Multiplication
and Addition sentences must be created in order to cover
a vertex.

GOAL 1: C   GOAL 2: A1 A3 B4 C1b   GOAL 3: B1 G6   PS: X
                         C2c C3a

220- 3 MATHNET-REAR TERRACE-5   20324   NET   18:17
George receives another poem. Hurrying to the bank he
is able to solve the crime and capture the criminal.
He's not finished, however. He has to rescue Kate whose
apartment is about to blow up.

GOAL 1: A   GOAL 2: A1 A3 B3 C1e   GOAL 3:   PS: X
                         C2a C2c C3a C3c

221- 1 TONY AND THE TOGAS   12100   SON   6:25
A Phoenician singer finds himself recording a song in
Rome and learns about Roman numerals in the process.

GOAL 1:   GOAL 2:   GOAL 3: A2   PS:

53

221- 2 DIRK NIBLICK: ILLEGAL LAWYER PT.1   20240   ANI   4:34
Dirk helps Fluff and Fold who are being swindled by a
crooked lawyer. They were left an inheritance, but are
being given less than their fair share due to the
lawyers misuse of fractions.

    GOAL 1: A B   GOAL 2: A1 B1 B3 B4 C1c GOAL 3: A3   PS: X
                       C2a

221- 3 MAP, THE   14050   LAF   1:23
An older boy and his little brother use a map scale to
estimate distance and travel time.

    GOAL 1: A C   GOAL 2: A1 A3 B2 B3 B4   GOAL 3: G4 C3 B1 PS: X
                       D1 C1a

221- 4 DIRK NIBLICK: ILLEGAL LAWYER PT.2   20241   PAR   2:20

    GOAL 1:   GOAL 2:   GOAL 3:   PS:

221- 5 SPADE PARADE: IN SEARCH OF YUCCA PUCK -1   15901   STU   2:45
Spade Parade takes on the case of Vanessa Van Vandervan
who has hired 3 consultants to tell her the route to the
Yucca Puck. She doesn't know which one tells the truth,
which lies, and which does both

    GOAL 1: A C   GOAL 2: A1 A2 A3 B1 B3 GOA 3: E3   PS: X
                       D2 C1a C1e C3b

221- 6 EB: SUM MEASURE TRI. #2   16460   ANI   0:14
This short animation ilustrates that the sum of the
angles of a triangle equals 180 degrees.

    GOAL 1: B   GOAL 2:   GOAL 3: G6   PS:

221- 7 SPADE PARADE: IN SEARCH OF YUCCA PUCK -2   15902   PAR   2:32
Spade Parade solves the case by asking several questions
to sort out a declared liar, a truth-teller, and a third
who sometimes tells the truth and sometimes lies.

    GOAL 1:   GOAL 2:   GOAL 3:   PS:

221- 8 MATHMAN: DECIMALS MORE THAN 1/2   15700   ANI   1:13
       Mathman plays a video game in which he must eat only
       decimal fractions more than 1/2.

       GOAL 1: C   GOAL 2:   GOAL 3: A4 D1   PS:

221- 9 MATHNET-CASE OF THE MISSING AIR-1   20020   NET   5:46
       The Mathnetters help the Robbery Division investigate a
       series of hold-ups in which a pattern emerges.

       GOAL 1:   GOAL 2: A1 B3   GOAL 3: C3   PS: X

222- 1 CLOSE CALL #5   20780   GAM   8:31
       Students compete against each other trying to get the
       closest estimate to: Fish in the Aquarium, Coconuts in
       the Wading Pool, Reg E.'s height in Hot Dogs, and
       Newspapers edge to edge.

       GOAL 1: C   GOAL 2: A1 B2 C1e C2c   GOAL 3: C1 C2 C3 PS: X

222- 2 AMAZING STORY OF NINES - 1   11351   STU   4:31
       A character stumbles upon a genie who explains the
       amazing story of nines to him. He learns that the sum of
       the digits of any multiple of 9 is 9 or a multiple of 9.

       GOAL 1: B   GOAL 2:   GOAL 3: B2 D2 B1 PS:
                                                          A1

222- 3 EB: MULTIPLES OF 9   20970   ANI   0:18
       This short animation illustrates the multiples of nine
       on a 100 grid.

       GOAL 1:   GOAL 2:   GOAL 3: B2   PS:

222- 4 AMAZING STORY OF NINES - 2   11352   PAR   1:03
       The genie provides examples that illustrate that the sum
       of the digits of any multiple of 9 is 9 or a multiple of
       9.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

55

222- 5 DIRKLET: DIVISIBLE BY 9   21310   ANI   1:37
       Dirk explains that if the digits of any whole number are
       added and the sum is divisible by nine, then the number
       started with is divisible by nine.

       GOAL 1:   GOAL 2: A1 B4 C2a D4   GOAL 3: B1   PS: X

222- 6 AMAZING STORY OF NINES - 3   11353   PAR   1:42
       The genie provides even more examples illustrating that
       the sum of the digits of any multiple of 9 is 9 or a
       multiple of 9.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

222- 7 EB: DOUBLE STAR POLYGON (version 2)   21520   ANI   0:28
       This short animation illustrates a 5-point star that is
       circumscribed by a pentagon.

       GOAL 1: B   GOAL 2:   GOAL 3: G6   PS:

222- 8 NINES   15870   SON   2:34
       The cast sings a country music tune expressing the idea
       that the sum of the digits of any multiple of 9 always
       add up to 9 or a multiple of 9.

       GOAL 1: B C   GOAL 2:   GOAL 3: B2 D2 B1 PS:

222- 9 MATHNET-CASE OF THE MISSING AIR-2   20021   NET   6:35
       The Mathnetters stake out gas stations which fit the
       pattern of those being robbed. They also create a data
       base in order to be better able to analyze the data
       being collected from the robberies.

       GOAL 1:   GOAL 2: A1 A2 B1 B2 B3   GOAL 3: C3 F5   PS: X
                                C3a C3b C4a C4b

223- 1 BLACKSTONE: DICE AND CARDS   21050   STU   3:22
       Blackstone uses a simple switch to illustrate a missing
       addend problem by forcing the spectator to choose a card
       determined by a throw of the dice.

       GOAL 1:   GOAL 2:   GOAL 3: D2   PS:

56

223- 2 POS-NEG JOUST: PARATROOPERS +5 PLUS -3   15294   ANI   0:21
When five "positive" clay-mation creatures parachute
onto three "negative" creatures, two "positive"
creatures remain.

GOAL 1: A   GOAL 2:   GOAL 3: A6 B1   PS:

223- 3 TRIANGLE SONG   13270   SON   2:00
This song uses still photography to show examples of
triangles in the world.

GOAL 1:   GOAL 2:   GOAL 3: G6   PS:

223- 4 TRIPLE PLAY #6   20690   GAM   6:33
Two students compete against each other trying to cover
the vertices of an equilateral triangle. Multiplication
and Addition sentences must be created in order to cover
a vertex.

GOAL 1: C   GOAL 2: A1 A3 P4 C1b   GOAL 3: B1 G6   PS: X
                        C2c C3a

223- 5 PERSON ON THE STREET: HYPOTENUSE   13004   LAF   0:52
The Person on the Street Interviewer asks several people
if they know what a hypotenuse is.

GOAL 1: C   GOAL 2:   GOAL 3: G6   PS:

223- 6 MATHNET-CASE OF THE MISSING AIR-3   20022   NET   13:46
The Mathnetters analyze data and look for a common
denominator among the robberies. They find that all the
stations which were robbed did have something in common.

GOAL 1:   GOAL 2: A1 A2 B1 B3 C1a GOAL 3: D1 F1 F4 PS: X
                        C1c C3a C3c C4b   F5 F6

224- 1 PIECE OF THE PIE #9   20430   GAM   7:00
Two teams alternate guessing the most common answers to
the survey question "Name something you do on a camping
trip." The team that accumulates the greater percentage
wins the game.

GOAL 1: A C   GOAL 2: A1 B1 B3 B6 C3b GOAL 3: A5 B1 D1 PS: X
                        D2   F6

224- 2 DIRK NIBLICK: FOOL MST OF THE PEOPL PT.1   20380   ANI   5:39
Dirk comes to the aid of Mr. Beazley who was swindled by
a Used Car salesman claiming he is giving 30% off the
base cost of a car.

GOAL 1: B   GOAL 2: A1 B1 B3 C1c   GOAL 3: A5   PS: X
                          C2a D1

224- 3 MATHMAN: SHOW INTERRUPT #1 (45%)   20190   ANI   0:28
Mathman is told that 45% of the show has elapsed and
must decide what percent remains.

GOAL 1: C   GOAL 2:   GOAL 3: A5   PS:

224- 4 DIRK NIBLICK: FOOL MST OF THE PEOPL PT.2   20881   PAR   2:35

GOAL 1:   GOAL 2:   GOAL 3:   PS:

224- 5 EIGHT PERCENT OF MY LOVE   11480   SON   2:47
Cris uses percentages to sing about the various ways his
love is divided. As Cris mentions a percentage, a
drummer displays the corresponding wedge of a pie chart.

GOAL 1: A C   GOAL 2:   GOAL 3: A5 F6   PS:

224- 6 EB: PARALLEL/NOT PARALLEL (VERSION 2)   21530   ANI   0:18
This short animation illustrates the difference between
lines that are parallel and lines that are not.

GOAL 1: B C   GOAL 2:   GOAL 3: G6   PS:

224- 7 MATHNET-CASE OF THE MISSING AIR-4   20023   NET   8:30
The Mathnetters question disc jockey Byle Dupe about the
robberies. They also notice a similarity between radio
station K-YUCH's advertising area and the area where the
robberies have taken place.

GOAL 1:   GOAL 2: B1 B3 C1a C3a   GOAL 3: G4   PS: X
                          C3c C4b D3

225- 1 SQUARE ONE SQUARES #9   20610   GAM   9:29
       Two students try to determine which cast member is
       giving the correct answer to the questions: Solids of
       Revolution, Green/Red Die, Chocolate Bunnies, and
       Spinners.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

225- 1 SQUARE ONE SQUARES #9 QUESTION 1   20611   SOS
       In this paintbox piece, a trapezoid is rotated along an
       axis.   What solid of revolution will be determined?

       GOAL 1: C   GOAL 2: A1 B4 C1e C2c   GOAL 3: G1 G2 G6 PS: X

225- 1 SQUARE ONE SQUARES #9 QUESTION 2   20612   SOS
       A die with two green faces and four red faces is
       hypothetically tossed 100 times. Which of two graphs
       better represent the probable outcome of this
       experiment?

       GOAL 1: C   GOAL 2: A1 B2 B5 C1d   GOAL 3: F4 F6   PS: X
                               C2c D1

225- 1 SQUARE ONE SQUARES #9 QUESTION 3   20613   SOS
       Which is a better buy: two for a nickel or three for a
       dime?

       GOAL 1: C   GOAL 2: A1 B4 C1b C1e   GOAL 3: B5 D1   PS: X
                               C2a

225- 1 SQUARE ONE SQUARES #9 QUESTION 4   20614   SOS
       Which of two spinners gives a better chance of hitting
       red?

       GOAL 1:   GOAL 2: A1 B4 B5 C1b   GOAL 3: D1 F1 F4 PS: X
                               C1e C2b C2c   G2

225- 2 DIRKLET: MATHMAN PROMO #1   21230   BUM   1:06
       Dirk promotes Mathman which is coming up soon on Square
       One TV.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

225- 3 BLACKSTONE: QUARTER PARITY   21090   STU   3:15
        Blackstone illustrates parity by forcing the spectator
        to choose a marked quarter through an apparently random
        sequence of interchanges.

        GOAL 1:   GOAL 2:   GOAL 3: B3   PS:

225- 4 MATHMAN: INEQUALITY 3+X > 10   20080   ANI   1:45
        Mathman plays a video game in which he must eat all
        numbers satisfying the inequality 3+x > 10.

        GOAL 1: C   GOAL 2:   GOAL 3: A4 B1 D1 PS:
                                                                D4

225- 5 EB: MULTIPLES OF 8 AND 12   20990   ANI   0:46
        This short animation illustrates the multiples of 8 and
        12 on a 100 grid.

        GOAL 1:   GOAL 2:   GOAL 3: B2   PS:

225- 6 SODA SHOPPE   16100   LAF   0:49
        Two customers use an easy way to compute a ten percent
        tip, which they then round up to the nearest ten cents.

        GOAL 1: A C   GOAL 2: A1 A2 B2 B4   GOAL 3: A5 A4 B4 PS: X

225- 7 MATHNET-CASE OF THE MISSING AIR-5   20024   NET   8:40
        Through logical thinking, the Mathnetters are able to
        catch Byle Dupe in the act of robbing a 10-4 store.

        GOAL 1: A   GOAL 2: A1 B1 C1a C4b   GOAL 3: F6   PS: X
                                D4

226- 1 DIRKLET: DIVISIBLE BY 5   21290   ANI   1:18
        Dirk explains that a whole number with a zero or a five
        in the ones place is divisible by five.

        GOAL 1:   GOAL 2: A1 C2a D1   GOAL 3: B1   PS: X

226- 2 BLACKSTONE: TURNING THE DIE   21040   STU   3:13
        Blackstone asks the spectator to rotate a carefully
        oriented die three times according to indicated
        directions, then again until the top number is 1, then
        once more. Now showing is 4, as predicted.

        GOAL 1:   GOAL 2:   GOAL 3: B3 D2   PS:

226- 3 RATINGS WAR   14870   STU   2:25
        Larry uses a double bar graph to contrast the number of
        people who eat rutabagas with the number of people who
        watch Square One TV.

        GOAL 1: A C   GOAL 2:   GOAL 3: F6 F5   PS:

226- 4 PIECE OF THE PIE #7   20410   GAM   6:10
        Two teams alternate guessing the most common answers to
        the survey question "Name something you see at a
        parade." The team that accumulates the greater
        percentage wins the game.

        GOAL 1: A C   GOAL 2: A1 B6 C3b D2   GOAL 3: A5 B1 D1 PS: X
                                                         F6

226- 5 DRAW A MAP   16690   SON   2:11
        In order for Luisa to reach Arthur's house, he gives her
        instructions to make a map. He includes significant
        landmarks and uses a scale where 1 inch equals 1 mile.

        GOAL 1: A C   GOAL 2: A1 B1 B3 C1a   GOAL 3: G4 G4 C2 PS: X

226- 6 MATHNET-CASE OF THE MAP WITH A GAP-1   20000   NET   11:47
        A boy named Bronco has asked the Mathnetters for help in
        solving a problem. He has a treasure map which he was
        able to decode using reflection with a mirror. The
        Mathnetters agree to help him.

        GOAL 1: A C   GOAL 2: A1 A2 B2 B3 B4   GOAL 3: A4 B4 E3 PS: X
                                B6 C1a C1e C3b   G2 G5

227- 1 ESTIMATION   21390   SON   3:51
A song about estimation which suggests that estimating
is a quick and easy way to get an answer fast. It is
quite a useful tool when an answer doesn't need to be
exact

    GOAL 1:   GOAL 2: Al B2   GOAL 3: C3   PS: X

227- 2 SQUARE ONE SQUARES #1.   20530   GAM   6:24
Two students try to determine which cast member is
giving the correct answer to the questions: Pickle
Pies, Silver Dollar, and Tables.

    GOAL 1:   GOAL 2:   GOAL 3:   PS:

227- 2 SQUARE ONE SQUARES #1 QUESTION 1   20531   SOS
Pickle Pies of the same size are illustrated via
paintbox. One pie is cut into fifths and the other into
sixths. The animation shows that the pie cut into fifths
will have the bigger slices.

    GOAL 1: C   GOAL 2: Al B4 Clb Cle   GOAL 3: A3 Dl   PS: X

227- 2 SQUARE ONE SQUARES #1 QUESTION 2   20532   SOS
Probability of a fair coin landing on heads is one half.
The probability is independent of the number of times
the coin is flipped.

    GOAL 1: C   GOAL 2: Al B5 C3c D4   GOAL 3: Fl F3   PS: X

227- 2 SQUARE ONE SQUARES #1 QUESTION 3   20533   SOS
Four people can sit at each of three tables when the
tables are separated. When the tables are pushed
together some of the space for seats is lost allowing
room for only eight people.

    GOAL 1: C   GOAL 2: Al B4 Cle   GOAL 3: Bl G6   PS: X

227- 3 GREMPOD AND BLOTMO: SPONGE CANDY   14420   STU   2:18
        Grempod, a Rigelian alien, offers his pal Blotmo a ripe
        sea fig from the planet Xerkne if he can guess which of
        his 4 hands holds the treat. The probability is 1/4
        that Blotmo will choose correctly.

        GOAL 1: C   GOAL 2: A1 A2 B1 B5 D1   GOAL 3: F1 A3   PS: X
                                    C2a

227- 4 HARRY'S HAMBURGER HAVEN   14240   STU   2:27
        As the characters attempt to shoot a commercial for
        Harry's Hamburger Haven, they note the equivalence of
        decimal, fraction, and percent.

        GOAL 1: C   GOAL 2:   GOAL 3: A4 A5 A3 PS:

227- 5 DIRKLET: NUMBER TRICK   21350   ANI   1:45
        Dirk demonstrates a number trick: take a 3-digit number,
        reverse them, subtract smaller from larger; middle digit
        of the difference will be 9 and the sum of the other two
        is 9.

        GOAL 1:   GOAL 2: A1 B4 C2a   GOAL 3: A2   PS: X

227- 6 EB: SPOT THE PENTAGONS   20910   ANI   0:25
        This short animation asks the viewer to identify which
        of the polygons are pentagons.

        GOAL 1:   GOAL 2: A1 D1   GOAL 3: G6   PS: X

227- 7 MATHNET-CASE OF THE MAP WITH A GAP-2   20001   NET   10:04
        The Mathnetters join forces with Bronco and ride horses
        into Mulch Gulch, a deserted ghost town. They are in
        search of the buried treasure.

        GOAL 1:   GOAL 2: B1   GOAL 3:   PS:

228- 1 DIRKLET: PAPER AND PENCIL #1   21250   BUM   1:09
        Dirk reminds the viewers that it is a good idea to have
        paper and pencil handy when they watch Square One TV.

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

228- 2 PHONER: THE ANSWER IS 2   20500   STU   2:50
       Beverly has a one-sided telephone conversation in which
       she chooses a number and performs a series of operations
       that always give her the answer of two.

       GOAL 1: A C   GOAL 2:   GOAL 3: B1 D2   PS:

228- 3 BLACKSTONE: 1089   10372   STU   3:05
       Blackstone asks the spectator to take a 3 digit number,
       reverse the digits, subtract the smaller from the
       larger, reverse those digits (treat it as a 3-digit
       number), and gets the answer 1089.

       GOAL 1:   GOAL 2:   GOAL 3: D2 G2 B1 PS:

228- 4 TRIPLE PLAY #8   20710   GAM   5:24
       Two students compete against each other trying to cover
       the vertices of an equilateral triangle. Multiplication
       and Addition sentences must be created in order to cover
       a vertex.

       GOAL 1: C   GOAL 2: A1 A3 B4 C1b   GOAL 3: B1 G6   PS: X
                               C2c C3a

228- 5 AVERAGE AMERICAN   10220   SON   3:02
       In this song, Larry sings about the statistical averages
       for various American habits to show Cynthia just how
       much of an "Average American" he is.

       GOAL 1: C   GOAL 2:   GOAL 3: F2   PS:

228- 6 MATHNET-CASE OF THE MAP WITH A GAP-3   20002   NET   12:17
       The Mathnetters and Bronco use triangulation to help
       locate the buried treasure. Their digging proves
       successful, not in finding the treasure, but in locating
       the other part of the map.

       GOAL 1: A C   GOAL 2: A1 A2 B1 B2 B3 GOAL 3: B5 C1 C2 PS: X
                               B4 B5 C1a C1e C   G4 G6

229- 1 CLOSE CALL #8   20810   GAM   8:14
       Students compete against each other trying to get the
       closest estimate to: Puzzle Pieces, Elephant with a
       Tutu, Candies on the Close Call Sign, and % of Audience
       with Baseball Caps.

       GOAL 1: C   GOAL 2: A1 B2 C2   GOAL 3: A5 C1 C2   PS: X

229- 2 MATHMAN: HEXAGONS   20140   ANI   1:25
       Mathman plays a video game in which he must eat all
       polygons which are hexagons.

       GOAL 1: C   GOAL 2:   GOAL 3: G6   PS:

229- 3 DIRK NIBLICK: TO HECK AND BACK PT.1   21120   ANI   5:31
       Dirk comes to the rescue of his neighbor, Mr. Beazley,
       who is accused of having robbed a bank in the town of
       Heck. Dirk proves Beazley's innocence based on
       distance, rate and time.

       GOAL 1:   GOAL 2: A1 B2 B3 B4 C1c GOAL 3: C2 C3   PS: X
                                 C2a C3b D1

229- 4 FIVE-NINETEEN BLUES   16170   LAF   1:18
       This song shows that you can round off a lot of numbers
       but not the time the train leaves.

       GOAL 1: A C   GOAL 2:   GOAL 3: B4   PS:

229- 5 DIRK NIBLICK: TO HECK AND BACK PT.2   21121   PAR   2:20

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

229- 6 MATHNET-CASE OF THE MAP WITH A GAP-4   20003   NET   8:08
       The Mathnetters and Bronco search for information which
       will help them decode their newly found map. After much
       trial and error, they realize that a mirror is the
       solution to deciphering the map.

       GOAL 1: C   GOAL 2: A1 A2 A3 B2 B4   GOAL 3: G2   PS: X
                                 B6 C3a C3b C3c

230- 1 TIME KEEPER   21410   SON   3:31
        Tempestt Bledsoe sings about keeping time in a factory
        and the clock arithmetic which is involved.

        GOAL 1: C   GOAL 2: A1 B4 C1b   GOAL 3: B3   PS: X

230- 2 DIRK NIBLICK: THE LINT TRAP PT.1   20270   ANI   4:58
        Dirk helps Fluff and Fold understand that they were
        underpaid by their boss, Soapy LaFong. He paid them for
        only four hours a day although they had clearly worked
        four and a half hours each day.

        GOAL 1: B   GOAL 2: A1 B4 C1c C2a   GOAL 3: B3   PS: X
                                 C2b

230- 3 EB: ROTATIONAL SYMMETRY #2   16440   ANI   0:31
        This short animation uses a 5-point star to illustrate
        the concept of rotational symmetry.

        GOAL 1: B   GOAL 2:   GOAL 3: G2   PS:

230- 4 MATHMAN: SYMMETRY   20180   ANI   1:36
        Mathman plays a video game in which he must eat all
        polygons which have a line of symmetry.

        GOAL 1: C   GOAL 2:   GOAL 3: G2   PS:

230- 5 DIRK NIBLICK: THE LINT TRAP PT.2   20271   PAR   2:48

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

230- 6 EB: DECIMALS/PERCENTS/FRACTIONS-25%   17030   ANI   0:25
        This short animation uses a square to illustrate the
        equivalence of 25%, .25, 25/100, and 1/4.

        GOAL 1: B   GOAL 2:   GOAL 3: A5 A3 A4   PS:

230- 7 DIET LITE WET   14230   STU   3:22
       As the characters attempt to shoot a commercial for Diet
       Lite Wet, they note the equivalence of fraction,
       decimal,and percent.

       GOAL 1: A C   GOAL 2:   GOAL 3: A3 A5 A4 PS:

230- 8 SQUARE ONE PUZZLER: CALENDAR   21140   ANI   0:58
       A short animation puzzler: If today is Wednesday, what
       day of the week will it be in twenty days?

       GOAL 1:   GOAL 2: A1 B4 C1b C1e   GOAL 3: B3   PS: X
                              C2a C2c

230- 9 MATHNET-CASE OF THE MAP WITH A GAP-b   20004   NET   7:58
       The Mathnetters help Bronco find the buried treasure
       after combining the two map pieces and using
       triangulation to locate the burial spot.

       GOAL 1: A C   GOAL 2: A1 B1 B3 B4 B6   GOAL 3: C1 C2 G4 PS: X
                              C1a C1e C4b   G6

231- 1 PIECE OF THE PIE #6   20400   GAM   7:31
       Two teams alternate guessing the most common answers to
       the survey question "Name something you identify by its
       smell." The team that accumulates the greater
       percentage wins the game.

       GOAL 1: A C   GOAL 2: A1 B3 B6 C3b D2 GOAL 3: A5 B1 D1 PS: X
                                                        F6

231- 2 DIRK NIBLICK: DO NOT FOLD, SPINDLE, PT.1   21110   ANI   6:07
       Dirk confronts a salesman about the legitimacy of his
       sales tactics. He pressures his customers into buying
       three sixty minute audio tapes for $3.95 instead of two
       ninety minute tapes for $2.95.

       GOAL 1: A   GOAL 2: A1 B1 B3 C1c D1 GOAL 3: B5   PS: X

231- 3 AREA-VER.2   20940   ANI   0:20
       This short animation shows that the area of a
       rectangular figure is the product of its length and
       width.

       GOAL 1:   GOAL 2:   GOAL 3: C1 C2   PS:

231- 4 DIRK NIBLICK: DO NOT FOLD, SPINDLE, PT.2   21111   PAR   2:45

    GOAL 1:   GOAL 2:   .   GOAL 3:   PS:

231- 5 MATHMAN: INEQUALITY T+40 < 75   20100   ANI   1:43
Mathman plays a video game in which he must eat all
numbers satisfying the inequality T+40 < 75.

    GOAL 1: C   GOAL 2:   GOAL 3: A4 B1 D1 PS:
                                                   D4

231- 6 MATHNET-CASE OF THE WILLING PARROT-1   20030   NET   8:44
The Mathnetters receive a call from Walter Treppling
about a haunted mansion. The Mathnetters go to
investigate, only to find that the mansion is owned by
Little Louie - a parrot.

    GOAL 1: A C   GOAL 2: A1   GOAL 3: C2 D2 G4 PS:

232- 1 COMBO JOMBO   21400   SON   3:41
The song demonstrates the use of combinatorics to find
the number of combinations of bands of several sizes
given the number of each type player available.

    GOAL 1: A   GOAL 2: A1 A2 B4 C1c D1 GOAL 3: B1 E1   PS: X

232- 2 DIRKLET: MAKE A DRAWING   21320   BUM   1:33
Dirk suggests that a good problem solving heuristic is
to make a drawing in order to visualize a problem more
clearly.

    GOAL 1:   GOAL 2: A1 C2a   GOAL 3:   PS: X

232- 3 DATA HEADACHE I   14311   STU   1:10
A woman uses a bar chart to organize her monthly
expenses and rid herself of a data headache.

    GOAL 1: A   GOAL 2:   GOAL 3: F6   PS:

232- 4 SQUARE ONE SQUARES #4   20560   GAM   5:27
        Two students try to determine which cast member is
        giving the correct answer to the questions: Grid with
        Star, and Futuristic Money.

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

232- 4 SQUARE ONE SQUARES #4 QUESTION 1   20561   SOS
        What number belongs in the square with the star in it,
        if you count along the edge of a 10x10 grid?

        GOAL 1:   GOAL 2: Al B4 Clc C3a   GOAL 3: Bl C2 C4 PS: X

232- 4 SQUARE ONE SQUARES #4 QUESTION 2   20562   SOS
        Which of the two figures contains more triangles?

        GOAL 1: C   GOAL 2: Al B4 Clb Cle   GOAL 3: G6   PS: X
                                 C2c C4a

232- 5 POLYHEDRONS - 1 (TETRAHEDRON) VERSION 2   21580   ANI   0:24
        This animation illustrates how an arrangement of
        triangles fold up into a 3-dimensional tetrahedron.

        GOAL 1: B   GOAL 2:   GOAL 3: G6 Gl G2 PS:

232- 6 BLACKSTONE: DIME, PENNY, NICKEL   15537   STU   2:04
        Blackstone uses a fundamental property of even and odd
        numbers to correctly identify which hand holds the dime
        and which holds the penny. His follow-up trick depends
        on psychology--not mathematics.

        GOAL 1:   GOAL 2:   GOAL 3: B3 Bl   PS:

232- 7 INFINITY (INFINITE REGRESS)   16250   ANI   0:41
        The camera zooms in on Beverly sitting in a room with a
        picture of Beverly sitting in a room with a picture of
        Beverly sitting in a room -- to illustrate the idea of
        infinite regress.

        GOAL 1: B   GOAL 2:   GOAL 3: Dl G2   PS:

232- 8 MATHNET-CASE OF THE WILLING PARROT-2   20031   NET   12:06
The Mathnetters find their ghost, Norman Tedge, hiding
out in the mansion. Then they uncover a puzzle with a
particular pattern which might prove to have a bearing
on the missing money.

GOAL 1:   GOAL 2: A1 B1 B3 B4 B5   GOAL 3: A5 D2 F1   PS: X
                         C1b C3a   F4 G6

233- 1 DIRKLET: CLOSE CALL PROMO/ESTIMATION   21210   ANI   1:01
Dirk promotes the use of estimation and plugs the
terrific game show of estimation, Close Call.

GOAL 1:   GOAL 2: A1 D1   GOAL 3: B4   PS: X

233- 2 GHOST OF A CHANCE   11950   SON   4:20
At a haunted house, a pizza delivery boy finds himself
in several threatening situations -- each of which has a
different probability of escape.

GOAL 1: A C   GOAL 2: A1 A2 B5 B6   GOAL 3: F1 F3   PS: X

233- 3 CLOSE CALL #6   20790   GAM   5:45
Students compete against each other trying to get the
closest estimate to: Colored Balloons, Bananas on a
Table, Slices of Bread in the Sandwich, and % of
Audience with Pom Poms.

GOAL 1: C   GOAL 2: A1 B2 C2a   GOAL 3: A5 C1 C2   PS: X
                                                C3

233- 4 MATHMAN: INEQUALITY 20 > A+5   20090   ANI   1:32
Mathman plays a video game in which he must eat all
numbers satisfying the inequality 20 > A + 5.

GOAL 1: C   GOAL 2:   GOAL 3: A4 B1 D1   PS:
                                                 D4

233- 5 POLYHEDRONS - 2 (HEXAHEDRON) (VERSION 2)   21590   ANI   0:28
This animation illustrates how an arrangement of squares
folds up into a 3-dimensional hexahedron.

GOAL 1: B   GOAL 2:   GOAL 3: G6 G1 G2   PS:

233- 6 PHONER: FIBONACCI SEQUENCE   15960   STU   2:08
Arthur has a one-sided telephone conversation where he
writes down the Fibonacci Sequence -- a series of
numbers beginning with 1 whose next term is generated by
adding the two terms previous.

   GOAL 1: A C   GOAL 2:   GOAL 3: B3 D2   PS:

233- 7 MATHNET-CASE OF THE WILLING PARROT-3   20032   NET   12:13
The Mathnetters are called in to solve the mystery of
the missing parrot. Using problem solving skills and
the Fibonacci sequence they are able to find the missing
bird.

   GOAL 1: B C   GOAL 2: A1 A3 B1 B4 B6   GOAL 3: B3 G6   PS: X
                   C1e C3a C4a C4b

234- 1 DIRK NIBLICK: GO WEST YOUNG MATH. PT.1   20250   ANI   5:53
Dirk comes to the rescue of townspeople being swindled
when purchasing land. Although they receive the proper
amount of land, it is not in dimensions suitable for
building.

   GOAL 1: A C   GOAL 2: A1 A2 B1 B3 B4   GOAL 3: C2 D2   PS: X
                   C1b C2a D1 D2

234- 2 TESSELLATION ANIMATION:TILE   10740   ANI   1:13
This animation shows both hexagons tessellating alone
and hexagons forming a tessellated pattern with a star
shape. The final image shows the same tessellated
pattern on a real-life tile mosaic.

   GOAL 1: A B   GOAL 2:   GOAL 3: G3 G6   PS:

234- 3 DIRK NIBLICK: GO WEST YOUNG MATH. PT.2   20251   PAR   3:10

   GOAL 1:   GOAL 2:   GOAL 3:   PS:

234- 4 MATHMAN: EXTRA SHORT   15660   ANI   0:27
Before Mathman can begin his video game, Mr. Glitch eats
him.

   GOAL 1: C   GOAL 2:   GOAL 3:   PS:

234- 5 STICK SQUARES - 1   13951   STU   0:25
        Alison Smith uses toothpicks to make a square that is
        divided into 9 smaller squares and asks the audience how
        many squares there are in all.

        GOAL 1: C   GOAL 2: A1 B4 D1 D2 C1e   GOAL 3: G6   PS: X
                         C4a

234- 6 SUGAR RAY SKETCH   14770   STU   4:32
        Battling for the Doggy Weight Championship, Sugar Ray
        Leonard figures out the weight of a dog by picking up
        the dog, weighing their total, and then subtracting his
        weight.

        GOAL 1: A C   GOAL 2: A1 A2 A3 B3 B4   GOAL 3: C2 B1   PS: X
                         D1 D3 C1e C4a

234- 7 STICK SQUARES - 2   13952   STU   0:42
        Alison Smith demonstrates toothpick square tricks to the
        viewing audience.

        GOAL 1: C   GOAL 2: A1 B4 D1 D2 C1e   GOAL 3: G6   PS: X
                         C4a

234- 8 MATHNET-CASE OF THE WILLING PARROT-4   20033   NET   11:03
        The Mathnetters investigate the latest crime, a
        birdnapping - namely, Little Louie. Their checking of
        resources leads them to Norman Tedge. They arrest him,
        but he escapes before their very eyes.

        GOAL 1:   GOAL 2: A1 B1 B3 B6 C3b   GOAL 3: B3   PS: X
                         D3

235- 1 ONE BILLION IS BIG   20850   SON   3:14
        The Fat Boys sing about one billion and its relative
        magnitude compared to one million.

        GOAL 1:   GOAL 2: A1 B2 B4 C1b   GOAL 3: A1 A2   PS: X
                         C2a D1

235- 2 DIRKLET: TRIPLE PLAY PROMO/TRIANGLES   21190   ANI   0:47
        Dirk says he loves Triple Play and wonders if all
        triangles are equilateral.

        GOAL 1:   GOAL 2: A1   GOAL 3: G6   PS: X

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235- 3 EB: PONG GAME   15180   ANI   0:19
    This animation illustrates billiard geometry and shows a
    ball rebounding from wall to wall before finally exiting
    the one opening.

    GOAL 1: B   GOAL 2:   GOAL 3: G2 G6   PS:

235- 4 TRIPLE PLAY #9   20720   GAM   6:15
    Two students compete against each other trying to cover
    the vertices of an equilateral triangle. Multiplication
    and Addition sentences must be created in order to cover
    a vertex.

    GOAL 1: C   GOAL 2: A1 A3 B4 C1b   GOAL 3: B1 G6   PS: X
                             C2c C3a

235- 5 MATHMAN: SQUARE NUMBERS #1   20040   ANI   1:39
    Mathman plays a video game in which he must eat all
    square numbers.

    GOAL 1: C   GOAL 2:   GOAL 3: B2   PS:

235- 6 SQUARE ONE PUZZLER: SALARY (.5 vs .25)   21150   ANI   0:48
    A short animation puzzler: Which is more, .5 or .25?

    GOAL 1:   GOAL 2: A1 B4 C1b C1e   GOAL 3: A3 A4 D1 PS: X
                             C2a

235- 7 SALE, THE   14060   LAF   1:07
    Two girls figure out what twenty percent off a thirty
    dollar dress is.

    GOAL 1: A C   GOAL 2: A1 A2 B4 C2c   GOAL 3: A5 B1 A3 PS: X

235- 8 MATHNET-CASE OF THE WILLING PARROT-5   20034   NET   11:58
    The Mathnetters use Walter Treppling's assistance in
    making a conversion between the Fibonacci sequence and a
    pattern of tiles. Solving this pattern leads them to
    the hidden fortune left in the will.

    GOAL 1: B C   GOAL 2: B1 B3 C1b C1e   GOAL 3: B1 B3 D2 PS: X
                             C2a C2c C3a C3b

236- 1 MATHMAN: INEQUALITY   19-C < 5   20110   ANI   1:29
Mathman plays a videogame in which he must eat all
numbers which satisfy the inequality 19-C < 5.

GOAL 1: C   GOAL 2:   GOAL 3: B1 D1 D4   PS:

236- 2 TRIPLE PLAY #10   PLAYOFF   20730   GAM   6:37
Two students compete against each other trying to cover
the vertices of an equilateral triangle. Multiplication
and Addition sentences must be created in order to cover
a vertex.

GOAL 1: C   GOAL 2: A1 B4 C1b C2c   GOAL 3: B1 G6   PS: X
                         C3a

236- 3 DIRK NIBLICK: MALL OR NOTHING AT ML PT.1   20260   ANI   6:06
Dirk comes to the rescue of Fluff and Fold who are being
deceived by a biased survey.

GOAL 1: B   GOAL 2: A1 A2 B1 B3 C1c GOAL 3: A5 F5   PS: X
                         C2a D1 D4

236- 4 BLACKSTONE: MIRASKILL-CANDIES   15550   STU   3:03
Blackstone has an even number of candies, 1/2 red, 1/2
green. The spectator places the candy, 2 at a time, in
piles according to color. Blackstone predicts that there
will be 2 fewer candies in 1 pile

GOAL 1:   GOAL 2:   GOAL 3: B3 A2   PS:

236- 5 DIRK NIBLICK: MALL OR NOTHING AT ML PT.2   20261   PAR   2:38

GOAL 1:   GOAL 2:   GOAL 3:   PS:

236- 6 PERSON ON THE STREET: COMBINATORICS   13007   LAF   1:08
The Person on the Street Interviewer asks various people
to define combinatorics.

GOAL 1: C   GOAL 2:   GOAL 3: E1   PS:

236- 7 POS-NEG JOUST: THE ABYSS +3 PLUS -3   15296   ANI   0:30
When three "negative" clay-mation creatures confront
three "positive" clay creatures, no clay creatures
remain.

GOAL 1: A   GOAL 2:   GOAL 3: A6 B1   PS:

236- 8 MATHNET-CASE OF THE GREAT CAR ROBBERY-1   20010   NET   5:43
The Mathnetters are called in to investigate the
increase in the number of cars being stolen in the L.A.
area. They begin by analyzing data collected from the
robberies in the hope of finding clues.

GOAL 1: C   GOAL 2: A1 B2 B3 B4 C1c GOAL 3: A5 B4 F5 PS: X
                           C2a C3a   F6

237- 1 PRIME NUMBERS   20840   SON   3:42
The Jets sing a song about prime numbers.

GOAL 1:   GOAL 2: A1 B4   GOAL 3: B2 B3   PS: X

237- 2 CLOSE CALL #10   20830   GAM   7:05
Students compete against each other trying to get the
closest estimate to: Cactus Thorns, Ping Pong Balls in
the Container, Bicycle Spokes, and Weight of Kids in the
Audience.

GOAL 1: C   GOAL 2: A1 B2 D3   GOAL 3: C1   PS: X

237- 3 DIRKLET: LOOK FOR A PATTERN   21030   ANI   1:46
Dirk suggests that a good problem solving heuristic is
to look for a pattern .

GOAL 1:   GOAL 2: A1 C2a C3a   GOAL 3: D2   PS: X

237- 4 MATHMAN: INEQUALITY 7+P < 7   20120   ANI   1:30
Mister Glitch plays a video game in which he must eat
all numbers which satisfy the inequality 7+P <7.

GOAL 1: C   GOAL 2:   GOAL 3: A6 B1 D1 PS:
                                                      D4

237- 5 PERCENTS   15380   SON   2:25
       This glitzy song expresses the relations among percents,
       fractions, and decimals.

       GOAL 1: A C   GOAL 2:   GOAL 3: A5 A3 A4 PS:

237- 6 MATHNET-CASE OF THE GREAT CAR ROBBERY-2   20011   NET   10:39
       The Mathnetters continue their investigation into the
       missng cars and meet Li So, a young lady whose car has
       been stolen. Although she saw it being towed, the
       L.A.P.D. has no record of taking it.

       GOAL 1:   GOAL 2: Al B4 Cld C2c   GOAL 3: A5 B4 F2 PS: X
                                C3a C3b C3c C4a   F5 F6

238- 1 SQUARE ONE SQUARES #6   20580   GAM   7:36
       Two students try to determine which cast member is
       giving the correct answer to the questions: 60 Day
       Calendar, Boxes with Triangles, and Stacked Nickels.

       GOAL 1:   GOAL 2:   GOAL 3:   PS:

238- 1 SQUARE ONE SQUARES #6 QUESTION 1   20581   SOS
       If today is Monday, what day of the week will it be
       sixty days from now? This paintbox piece examines the
       problem.

       GOAL 1: C   GOAL 2: Al B4 Clc C2c   GOAL 3: B3   PS: X
                                C3a

238- 1 SQUARE ONE SQUARES #6 QUESTION 2   20582   SOS
       What will the two boxes look like when they are glued
       together so that the triangles on them are perfectly
       aligned?

       GOAL 1: C   GOAL 2: Al B4 Cle C2c   GOAL 3: G2 G6   PS: X
                                D1

238- 1 SQUARE ONE SQUARES #6 QUESTION 3   20583   SOS
       Which is worth more; your height in stacked nickels or
       your height in quarters edge to edge?

       GOAL 1: C   GOAL 2: Al B2 B4 Cle   GOAL 3: B5 Cl C3 PS: X
                                C2c   D1

238- 2 DIRK NIBLICK: ITTY BITTY BUSINESS PT.1   20220   ANI   5:36
Dirk comes to the aid of the town merchants who are
having to close business due to being swindled by a
crooked accountant.

        GOAL 1: A   GOAL 2: A1 A2 B1 B3 B4   GOAL 3: A4 A5   PS: X
                                 C1c C2a D1 D4

238- 3 OOPS! 804 - 236   20470   STU   1:30
A confused character makes a mistake when subtracting
804 - 236 which causes a stock-footage disaster.

        GOAL 1: A   GOAL 2: A1 A2 B4 D1   GOAL 3: B1 A2   PS: X

238- 4 DIRK NIBLICK: ITTY BITTY BUSINESS PT.2   20221   PAR   2:59

        GOAL 1:   GOAL 2:   GOAL 3:   PS:

238- 5 MATHNET-CASE OF THE GREAT CAR ROBBERY-3   20012   NET   9:39
20,000 cars have disappeared from L.A. during the past
two months with a recovery rate of only 30 percent. The
Mathnetters decide to speak to a used car dealer to
learn more about the missing cars.

        GOAL 1:   GOAL 2: A1 B1 B3 C1c   GOAL 3: B5 F5 F6 PS: X
                                 C2c C3a C3b C4a

239- 1 ICE CREAM STORE: CALORIES   10130   STU   3:10
A dieting woman enters an ice cream store run by a
Valley Boy who uses a bar chart and percents to compare
the calories of the various frozen treats.

        GOAL 1: A C   GOAL 2: A1 B3 D1 C1d   GOAL 3: A5 A3 D1 PS: X
                                                            F6

239- 2 TESSELLATIONS   15810   SON   3:12
A boppy beach tune illustrates the concept of
tessellation as surfers cover their boards and the beach
with repeating geometric shapes.

        GOAL 1: B   GOAL 2:   GOAL 3: G3 G6   PS:

239- 3 DIRKLET: DIVISIBLE BY 3   21300   ANI   1:40
       Dirk explains that if the digits of any whole number are
       added and the sum is divisible by three, then the number
       started with is divisible by three.

       GOAL 1: A B C   GOAL 2: A1 B4 C2a   GOAL 3: B1   PS: X

239- 4 PIECE OF THE PIE #11   20450   GAM   5:48
       Two teams alternate guessing the most common answers to
       the survey question "Name your favorite musical
       instrument." The team that accumulates the greater
       percentage wins the game.

       GOAL 1: A C   GOAL 2: A1 B6 C3b   GOAL 3: A5 B1 D1 PS: X
                                                        F6

239- 5 EB: MIXED NUMBERS 3/2   20960   ANI   0:13
       This short animation illustrates mixed numbers by
       showing the same amount of liquid in a number of
       different glasses.

       GOAL 1: A   GOAL 2:   GOAL 3: A3 D1   PS:

239- 6 DATA HEADACHE III   14310   STU   1:10
       A corporate executive uses a line graph to organize her
       expenses and rid herself of a data headache.

       GOAL 1: A   GOAL 2:   GOAL 3: F6   PS:

239- 7 MATHMAN: PERCENTAGES MORE THAN 1/2   15710   ANI   1:17
       Mathman plays a video game in which he must eat only
       percentages that are less than 1/2.

       GOAL 1: C   GOAL 2:   GOAL 3: A5 D1   PS:

239- 8 MATHNET-CASE OF THE GREAT CAR ROBBERY-4   20013   NET   10:31
       With Li So's help, the Mathnetters determine that the
       pattern of heavy cars being stolen is an important clue
       in the crimes. They hypothesize that the cars are being
       recycled as scrap metal.

       GOAL 1:   GOAL 2: A1 B2 B3 B4 B5   GOAL 3: B1 B4 B5 PS: X
                               B6 C1c C2c C3b   F6

240- 1 DIRKLET: COMPARE FRACTIONS (1/3 1/4)   21380   ANI   1:31
       Dirk compares the fractions 1/3 and 1/4 and concludes
       that 1/3 is larger than 1/4.

       GOAL 1:   GOAL 2: A1 C2a C2b   GOAL 3: A3 D1   PS: X

240- 2 BLACKSTONE: FIVE ENVELOPE SPELLING   21100   STU   4:40
       By seeding an envelope with money among four others with
       only messages, Blackstone retains the money for himself
       when all count off to choose one. He thus illustrating
       a careful use of remainders.

       GOAL 1:   GOAL 2:   GOAL 3: D2   PS:

240- 3 ARCHIMEDES   21130   SON   2:56
       This song about Archimedes highlights some of his
       inventions and discoveries.

       GOAL 1: A   GOAL 2:   GOAL 3:   PS:

240- 4 MATHMAN: FRACTIONS GREATER THAN 1   20070   ANI   1:37
       Mathman plays a video game in which he must eat all
       fractions which are greater than 1.

       GOAL 1: C   GOAL 2:   GOAL 3: A3   PS:

240- 5 MATHNET-CASE OF THE GREAT CAR ROBBERY-5   20014   NET   15:24
       The Mathnetters set a trap for the car robbers. The
       robbers fall for the trap, leading the Mathnetters to
       the scrap metal site where they catch their culprit.

       GOAL 1:   GOAL 2: A1 B1 B3 B4 C1d GOAL 3: B4 B5 F2 PS: X
                                Cle C3a   F5 F6